ZC Series Owner’s Handbook

VECTRA

HOLDEN

www.holden.com.au

Owner's Name ....

Address ....

Town ....

State..........................Postcode ....

(17 character ISOVIN) Vehicle Identification Number

Model Name ....

Reg. No...........................Eng. No. ....

Odometer Reading ....

Date of Purchase ....

Vehicle Identification Certificate

Selling Retailer's
Stamp & Signature ....

Holden Ltd ABN 84 006 893 232 (hereinafter Holden).

Change of name, address or ownership

In the event of a Safety Recall or for various reasons, Holden may need to contact you as the owner of this vehicle. Also, if less than three years old, this vehicle qualifies for Roadside Assistance. Refer to Chapter 9. If you have recently changed your address or name, or purchased this vehicle second-hand, please help us to help you by taking a few minutes to fill in and mail the form on the third page of this handbook. For information about Holden's privacy policy, please visit Holden's website at *www.holden.com.au* .

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Part No. 92117680
July 2003 (ZC Vectra, print 4)

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We thank you for choosing Holden and want to assure you of our continuing interest in your motoring pleasure and satisfaction and compliment you on your choice.

This handbook applies to all the current Vectra models. Therefore, due to different models and options, you may find reference in this Handbook to some equipment not installed in your vehicle.

Please note that all information, illustrations and specifications in this handbook are based on the latest production information available at the time of printing. Holden reserves the right to make changes at any time without notice and without incurring any obligation.

CHANGE OF ADDRESS OR OWNERSHIP

Please fill in the form below if you have changed your name, address, bought the vehicle second-hand, or have become the new driver.

Holden requires these details in order to contact the operator in the event of a safety recall and to keep the initial 3 year Roadside Assistance details up to date (refer to Chapter 9). For information about Holden's privacy policy, please visit Holden's website at *www.holden.com.au* .

Please mail to the address on the back of this page.

Please tick the appropriate box:

☐ Original Owner ☐ Subsequent Owner

Title: (Mr, Mrs, Miss, Ms, etc.)

First name in full or initials

Surname or Name of Company / Institution / Government Department

Address

Street / box

City / Town

State

Postcode

1st contact phone no

2nd contact phone no

Email address

Vehicle registration number

Holden number (if fitted – refer to Chapter 8)

ISOVIN Number (refer to Chapter 8)

Place in an envelope and mail to:

The Manager – Warranty Administration
Service Department
Holden Limited
Box 548D, G.P.O.
Melbourne
Victoria, 3001

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CHAPTER 1

Dashboard

The following page illustrates the dashboard, identifying the gauges, warning lights, controls and switches; page reference numbers are listed next to each item.

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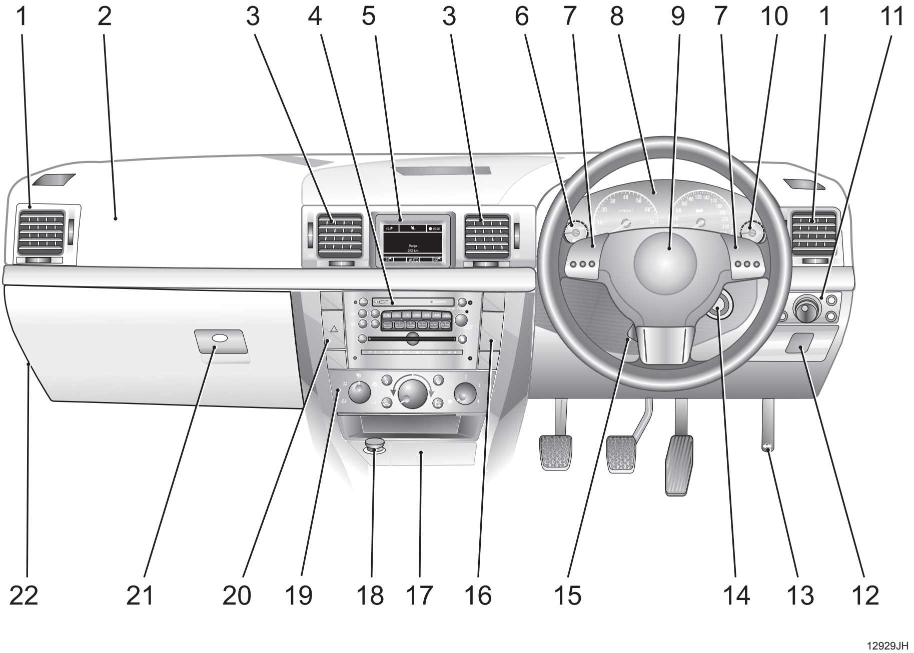

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IGNITION SWITCH AND HORN

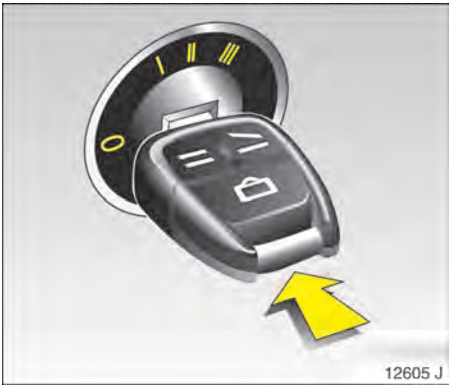
Ignition switch

O LOCK: Ignition off. The steering lock is enabled when key is removed.

I OFF: Steering unlocked, ignition off.

II ON: Ignition on.

III START: Start the engine.



Lock steering column

Withdraw the key in position **O**. Rotate the steering wheel until the lock engages.

WARNING:

Do not turn the engine off while the vehicle is moving. Power assisted equipment (such as brakes or steering) which are operated by the engine will be ineffective. Vehicles with a manual transmission: never remove the key while the vehicle is moving, as this will lock the steering wheel. (Vehicles with an automatic transmission have a lock which prevents the key from being removed while driving. Refer to Chapter 4.)

An audible warning will remind you when:

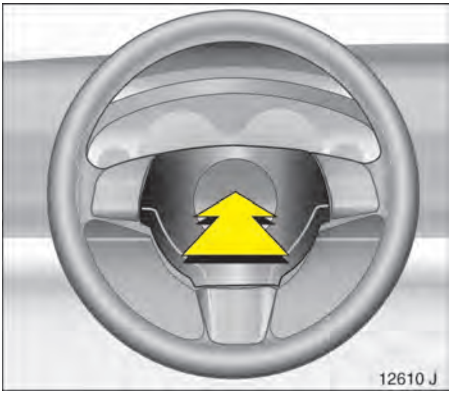
- you are leaving the vehicle and have not removed the ignition key
- you are leaving the vehicle and have left the headlights on.

Release steering column lock

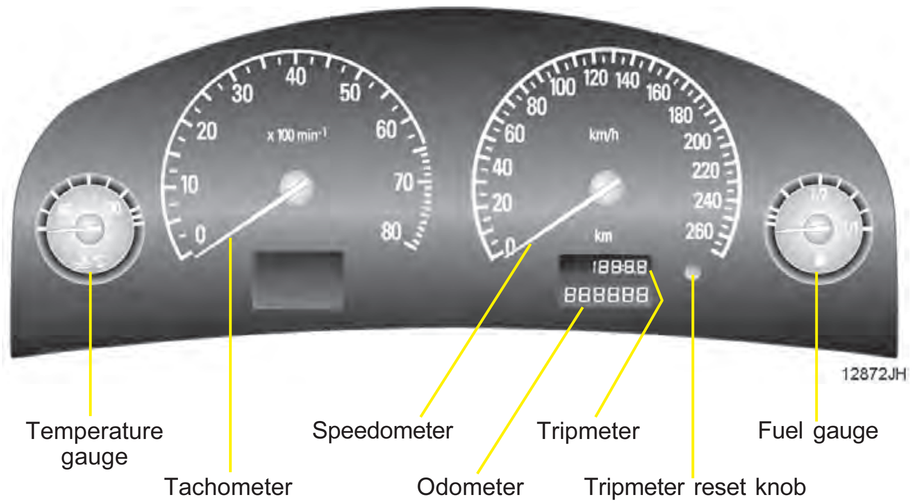
To release the steering column lock, move the steering wheel slightly and turn the key to position I.

Horn

Activate the horn by pressing the centre part of the steering wheel.



GAUGES


x 100 min⁻¹
km/h
km
12872JH
Temperature gauge
Tachometer
Speedometer
Odometer
Tripmeter
Tripmeter reset knob
Fuel gauge

Tachometer

The tachometer indicates the engine speed in revolutions per minute (r.p.m.).

Sustained operation of the engine in the warning zone will cause serious engine damage.

The warning zone is shown here at engine speeds above 6500 r.p.m.

Speedometer

The speedometer indicates vehicle speed in kilometres per hour (km/h). The window below the speedometer is for the tripmeter and odometer.

Tripmeter

The tripmeter (on the top) records kilometres travelled on a particular trip. To reset the tripmeter to zero, push the reset knob (to the right of the window) when the ignition is on.

Odometer

The odometer records kilometres travelled since the vehicle was built. When the ignition is off, the odometer can be displayed for approximately 15 seconds by briefly pushing the reset knob.

GAUGES cont.

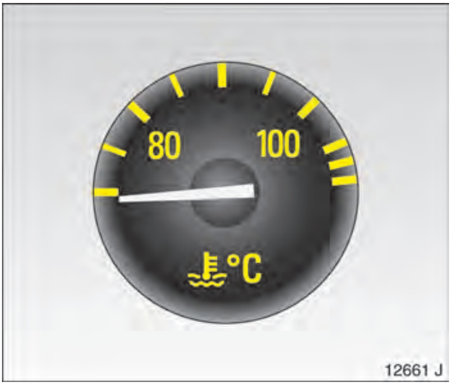
Engine temperature gauge

The temperature gauge indicates the engine coolant temperature.

If the pointer is to the left of the 80 mark, the engine is not yet at operating temperature.

If the pointer is between the 80 mark and the 100 mark, the engine is at normal operating temperature.

If the pointer moves to the right of the 100 mark for more than 30 seconds, the engine temperature is too high. If this occurs, stop the vehicle as soon as it is safe to do so and turn off the engine. Refer to Chapter 6 for further information.



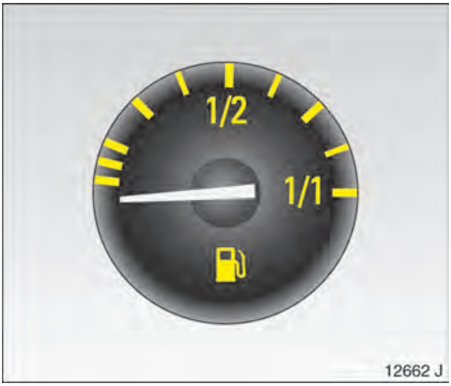
Fuel gauge

Refer to Chapter 8 for the fuel tank capacity.

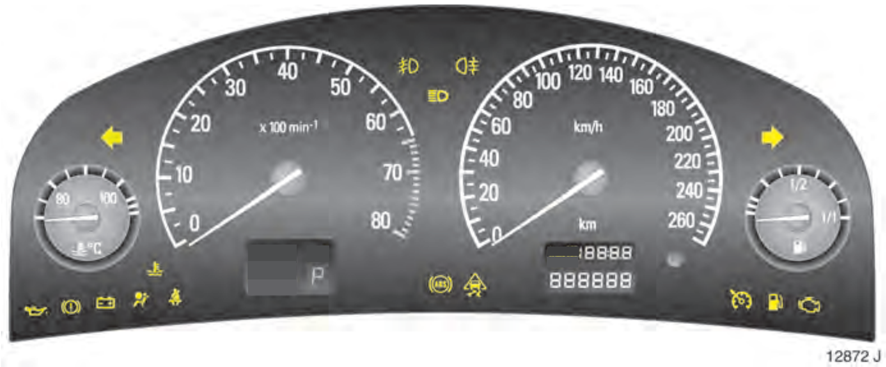
Add fuel to the fuel tank when the gauge indicates low fuel or when the fuel symbol illuminates.

If the fuel symbol flashes, fuel should be added to the tank immediately. Refer to Chapter 5.

Note: Never let the tank become empty; this can cause damage to the exhaust system components.



WARNING / REMINDER LIGHTS



Front fog lights (if fitted)

Illuminates when the front fog lights are switched on.

Rear fog lights (if fitted)

Illuminates when the rear fog lights are switched on.

High beam

Illuminates when the high beam headlights are in use or are flashed.

Left and right turn signal indicators

Flash when the turn signal lights are in use. If the symbol flashes rapidly, a turn signal light bulb may have failed.

Oil pressure

Illuminates when the ignition is switched on and goes out after the engine is started. It can illuminate when idling if the engine is hot, but must go out when engine speed is increased. If this warning light illuminates during driving, stop the vehicle as soon as possible and switch off the engine. Do not run the engine when this light remains illuminated. Check the engine oil level. If the oil level is normal, have the system checked at the nearest Holden Retailer.

Brake system and clutch system

Illuminates when the ignition is switched on and the park brake is applied and / or the brake or clutch fluid levels are too low. It goes out after the engine is started.

To check that the bulb is working, ensure that the symbol illuminates when the park brake is applied and the ignition is on. If it illuminates during driving, ensure the park brake is not applied, stop the vehicle as soon it is safe to do so and have the system checked at a Holden Retailer.

Battery

Illuminates when the ignition is switched on. Goes out when the engine is started. If it illuminates during driving, the battery is not being charged (engine cooling may also be affected). Have the system checked at a Holden Retailer as soon as possible.

WARNING / REMINDER LIGHTS cont.

Airbag and seat belt pretensioners

Illuminates for a few seconds when the ignition is switched on. If it does not go out or if it illuminates during driving, there is a defect in the system. In this condition, the airbag and / or seat belt pretensioners might not function correctly, especially in an accident. Have the system checked at your Holden Retailer as soon as possible. Refer to Chapter 3 for more information about seat belt pretensioners, or to Chapter 6 for more information about airbags.

Coolant temperature

If this light illuminates while the engine is running, the coolant temperature is too high. Refer to Chapter 6.

Seat belt

The seat belt warning light flashes when the ignition is switched on, unless / until the driver's seat belt is engaged. If the driver's seat belt is not engaged and the vehicle speed exceeds 25 km/h, a warning chime sounds. The warning chime will continue to sound for 3 km or until the seat belt is engaged. This is to remind occupants to fasten their seat belts. The chime also sounds (once) if the driver's seat belt is released before the ignition is turned off.

Anti-lock Brake System (ABS)

Illuminates for a few seconds when the ignition is switched on. If it does not go out or if it comes on during driving, a fault has been detected in the ABS. The vehicle brake system remains operational but without ABS assistance. Refer to Chapter 4. Have the system checked at a Holden Retailer as soon as possible.

Traction control

Illuminates for a few seconds when the ignition is switched on. The warning light flashes when the system is controlling wheel spin. Refer to Chapter 4.

Cruise Control (if fitted)

Illuminates when cruise control is activated. Refer to Cruise Control, in this chapter.

Low Fuel

Illuminates for a few seconds when the ignition is switched on and when the fuel gauge enters the red zone. This light may come on slightly earlier when cornering.

Emissions

Illuminates when the ignition is switched on and goes out shortly after the engine starts. Your vehicle is fitted with an emission monitoring system and this warning light indicates when the monitoring system detects that a system service is required.

If the symbol illuminates when driving, service to the emission system may be required. Although the vehicle may still be drivable and not require towing, have the system checked at your Holden Retailer.

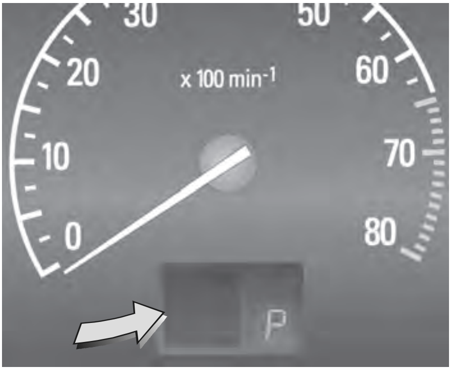
If the symbol *flashes* while driving, reduce speed until the light stops flashing and take the vehicle to a Holden Retailer as soon as possible.

WARNING / REMINDER LIGHTS cont.

Tachometer display window

The following warning / reminder lights may appear in the left-hand side of the tachometer display window.

For vehicles with automatic transmission, the right-hand side of this window displays the currently engaged gear.



Immobiliser

If this light illuminates while the ignition is on, the system does not recognise the ignition key and the engine will not start.

Power steering

Illuminates when a fault is detected in the power steering system. Power steering is disabled.

Note: When power steering is disabled, the vehicle can still be steered but considerable effort is required; have the system checked at a Holden Retailer.

Transmission / engine / immobiliser fault control

Illuminates when a fault is detected in the transmission electrics, the engine electrics or the immobiliser. The fault might be eliminated by switching the engine off and then on again. If the fault is not eliminated, have the system checked at a Holden Retailer.

When this light is illuminated, the transmission no longer shifts automatically and gear selection is based on the shift lever position. Refer to Chapter 4.

Driving can be continued, as follows:

- manual = 2nd and 5th gear can be selected or, depending on the fault, only 5th gear
- automatic = N, R, P and D (only 5th gear) can be selected.

If this light illuminates only briefly, it is of no significance. If it flashes when the ignition is on, a fault has been detected in the immobiliser system. Have the system checked at a Holden Retailer as soon as possible.

Boot lid / tailgate open

Illuminates when the boot lid or tailgate is open.

WARNING / REMINDER LIGHTS cont.

Airbag system, belt tensioners

Illuminates for a few seconds when the ignition is switched on. A fault has been detected in the airbag or belt tensioner system if the light:

- does not illuminate at all
- does not extinguish a few seconds after the ignition is switched on, or
- illuminates when driving.

Note: If any of these situations occur, the systems may not be triggered in an accident; have the system checked at a Holden Retailer.

Bulb failure

Illuminates when a failed bulb is detected. Check the operation of the lights and replace the failed bulb. Refer to Chapter 6.

Brake lining wear

Illuminates when the engine is running and the front disc pads are worn down to minimum thickness. Have the worn brake pads replaced by your Holden Retailer.

Engine oil level

Illuminates when the oil level is too low. Check and correct the oil level at the next opportunity. Refer to Chapter 7.

Coolant level

Illuminates when the coolant level is too low. Check and correct the coolant level without delay. Refer to Chapter 7.

Service interval

Various items of engine-specific data are continuously recorded, and from them the remaining distance to the next service is calculated.

This light illuminates and displays the approximate remaining distance until a system service is required. To view this while the ignition is off, press the setting knob below the tachometer.

When the remaining distance is less than 1500 km and the ignition is on, this light illuminates and a remaining distance of 1000 km displays.

When the remaining distance is less than 1000 km, this light illuminates for several seconds when the ignition is switched on.

Door open

Illuminates when a door or boot lid is open.

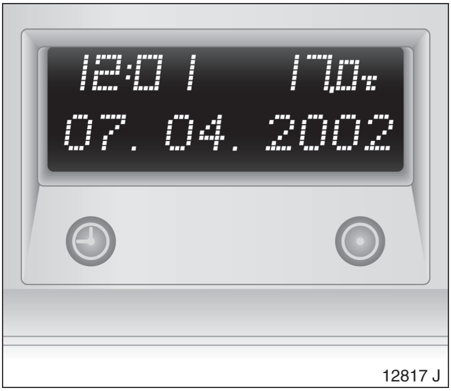
TRIPLE-INFORMATION DISPLAY (if fitted)

When the ignition is on, the time and outside temperature are displayed. The radio frequency is displayed in place of the date.

When the ignition is off, the time, date and outside temperature can be displayed for approximately 15 seconds by briefly pressing either 🕘 or ⊙.

The brightness of the display can be adjusted when the park lights or headlights are on. Refer to Light Switches, in this chapter.

The display of --.-°C (or --.-°F) indicates a fault. Have your Holden Retailer check this function.



Setting the date and time

To adjust the date and time, turn on the ignition and switch off the radio.

Press the 🕘 or ⊙ button as follows:

🕘 (Approximately 2 seconds.) The day setting flashes.

⊙ Repeat until the day setting is correct.

🕘 The month setting flashes.

⊙ Repeat until the month setting is correct.

🕘 The year setting flashes.

⊙ Repeat until the year setting is correct.

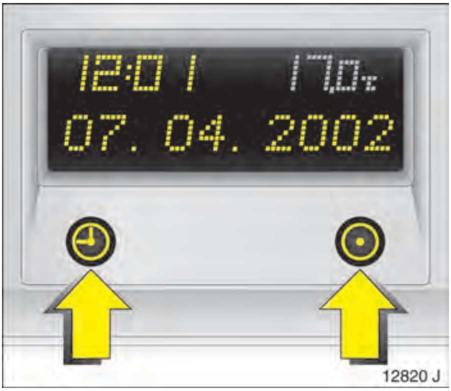
🕘 The hour setting flashes.

⊙ Repeat until the hour setting is correct.

🕘 The minute setting flashes.

⊙ Repeat until the minute setting is correct.

🕘 The clock starts at 0 seconds.



If the time setting only is to be set, press 🕘 for approximately 2 seconds, then repeat pressing 🕘 until the hours or minutes setting flashes. Adjust as outlined above.

Outside temperature

A fall in temperature is indicated immediately, but a rise in temperature is indicated after a time delay.

WARNING:

The road surface may already be icy even though the display indicates a temperature above 0°C.

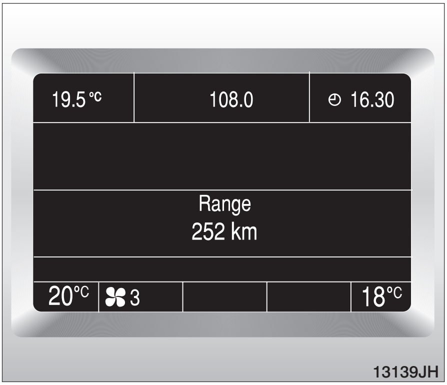
GRAPHIC INFORMATION DISPLAY (if fitted)

The display in your vehicle may look slightly different to the illustrations shown.

Features

When the ignition is on, the graphic information display provides information about:

- time
- date
- outside temperature
- check control information
- radio functions
- trip computer functions
- climate control features.



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The information displayed depends on the selected features and settings.

Note: The date displays when the radio is off and the ignition is on.

The brightness of the display can be adjusted when the park lights or headlights are on. Refer to Light Switches, in this chapter.

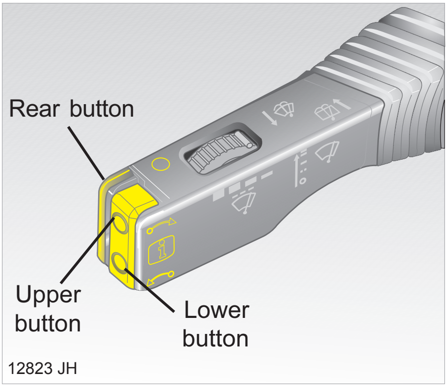
Interruption of power supply

If the battery has been disconnected or the battery voltage has dropped to a low level, the trip computer values will be lost, but the check control function will automatically check all functions. Stored fault warnings will appear on the display one after the other.

Control buttons

Use the control buttons for navigating and selecting:

- the check control menu,
- the trip computer features.



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The control buttons are integrated into the wiper lever.

To acknowledge a check control fault warning, refer to Acknowledge a fault warning in this chapter.

To use the trip computer, press one of the control buttons on the wiper lever until a menu shows on the Graphic Information Display.

GRAPHIC INFORMATION DISPLAY (if fitted) cont.

Check control

The check control function monitors the following items:

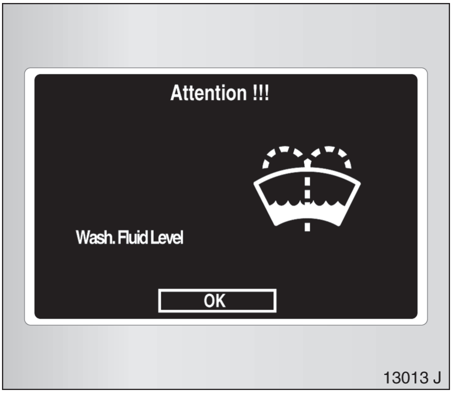
- fluid levels (windscreen washer and power steering)
- key remote control batteries
- brake light bulbs and their wiring and fuses
- indicator light bulbs and their wiring and fuses.

These items are automatically checked when the ignition is switched on except for the bulbs, which are checked when the lights are switched on.

Check control fault warnings

If a fault is detected, a corresponding fault warning displays. If there are several fault warnings, they display one after the other.

Note: Some of the fault warnings display in an abbreviated form.



Attention !!!

Wash. Fluid Level

13013 J

The following fault warnings may display; take the corresponding action to correct the problem:

FAULT WARNING	FAULT	ACTION
Checking wash water level	Fluid level in the washer system is too low.	Top up the fluid level. Refer to Chapter 7.
Checking power assisted steering oil level	Level in electro-hydraulic power assisted steering system is too low.	Consult a Holden Retailer for correction of fluid level.
Check battery for remote control	Battery voltage of the remote control unit is too low.	Replace the battery. Refer to Chapter 6.
Check anti-theft alarm system	Anti-theft alarm system is defective.	Consult a Holden Retailer for system repairs.
Check brake lamp switch	Brake lamp does not light up when brake is applied.	Consult a Holden Retailer for system repairs.
Check (specific location) lamp	Bulb failure.	Replace faulty bulb. Refer to Chapter 6.

GRAPHIC INFORMATION DISPLAY (if fitted) cont.

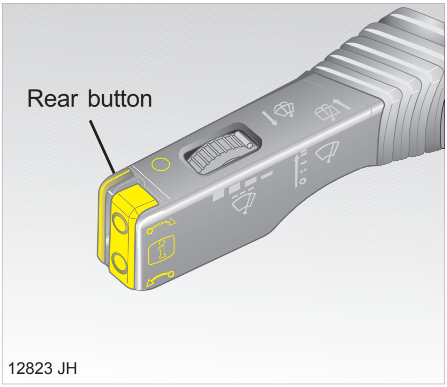
Acknowledge a fault warning

If a fault is detected, the fault warning display will override the trip computer display until the fault is acknowledged.

To acknowledge a fault, press O (the rear button) on the wiper lever. If several fault warnings exist, they must be acknowledged one at a time.

When all fault warnings have been acknowledged, the display reverts to trip computer information. However, a warning may display to remind you that one or more faults have been detected.

Once the faults have been remedied, the fault warnings are automatically cleared.



The following fault warnings reappear 15 minutes after they have been acknowledged:

- BRAKE LIGHT
- BRAKE LIGHT FUSE
- HEADLIGHT TAIL LIGHT.

After the ignition has been switched off and switched on again, the stored fault warnings appear on the display one after the other.

TRIP COMPUTER (if fitted)

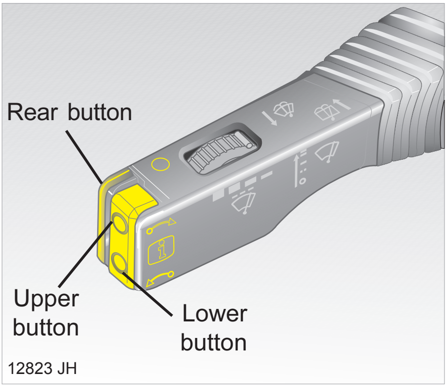
Display the trip computer

The trip computer is a function of the Graphic Information Display. It provides vehicle data which is continuously recorded and evaluated.

With the ignition on, press and hold any of the control buttons (O, ↶ or ↷) on the wiper lever, until the trip computer menu displays.

Move down through the menu items using the lower button (↷).

Move up through the menu items using the upper button (↶).



Make the selection by pressing the rear button (O). Selections are indicated by ▶ in front of the menu item.

To view the options for an item, use the ↶ and ↷ buttons to highlight the item and press the rear button (O) to select the item. Then highlight and select Settings.

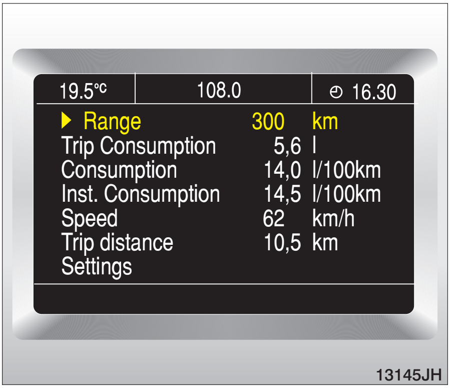
Select Return to view the previous menu or to exit the trip computer from the main menu. When exiting the trip computer, the last selected item features in the information display.

Functions

The following functions can be selected from the trip computer menu:

- Range (distance to empty).
- Trip Consumption (fuel used).
- Average Consumption (fuel).
- Instantaneous Consumption (fuel).
- Speed (average).
- Trip Distance (distance travelled).

Note: The display of any fault warnings detected will override the trip computer display.



19.5°C 108.0 ⏲ 16.30

▶ Range	300	km
Trip Consumption	5,6	l
Consumption	14,0	l/100km
Inst. Consumption	14,5	l/100km
Speed	62	km/h
Trip distance	10,5	km
Settings		

The trip computer can be reset at any time via the Settings option (refer to Trip Computer, Settings, in this chapter). However, the following times may be useful:

- At each tank refill. To develop results that are averaged out over the full tank of fuel.
- At the beginning of a trip. This might involve many tank refills and therefore, results can be computed over the total journey.

When resetting the Trip Computer, previously stored values are reset, excluding the following data, which cannot be reset:

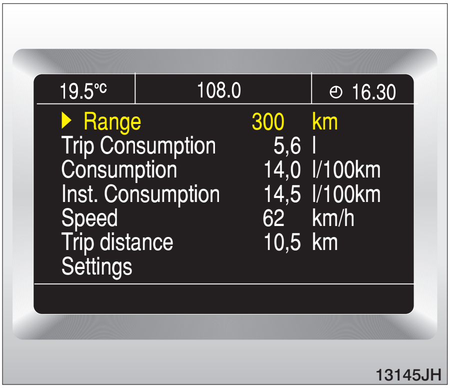
- Instantaneous Consumption (fuel), and
- the outside temperature.

TRIP COMPUTER (if fitted) cont.

Range (distance to empty)

The range is calculated from the current contents of the fuel tank and the average consumption over the last 20 to 30 kilometres of the journey. The measurement is shown in kilometres (km).

After filling up with fuel, the range adjusts itself automatically after a short time. This adjustment can also be undertaken manually. Refer to Trip computer, Resetting, in this chapter.



19.5°C | 108.0 | ◴ 16.30

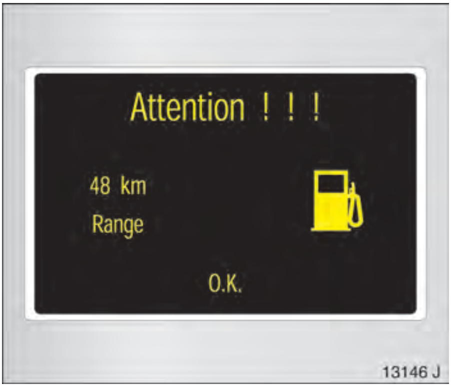
▶ Range	300	km
Trip Consumption	5,6	l
Consumption	14,0	l/100km
Inst. Consumption	14,5	l/100km
Speed	62	km/h
Trip distance	10,5	km
Settings		

RANGE UNDER 50 km

If the fuel in the tank will allow less than 50 km, a warning displays.

Acknowledge the warning by pushing the rear button (O) on the wiper lever.

If your journey is interrupted and the ignition is turned off, this warning will display again when the ignition is turned on.



Attention ! ! !

48 km

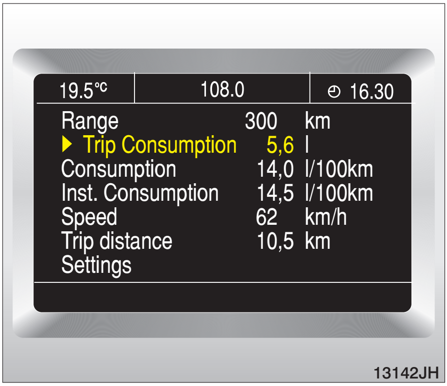
Range

O.K.

Trip Consumption (fuel used)

This feature displays the amount of fuel consumed since the trip computer was reset.

This measurement is shown in litres and can be reset at any time. Refer to Trip computer, Resetting, in this chapter.



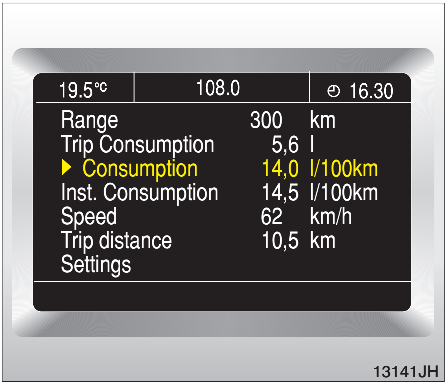
19.5°C | 108.0 | ◴ 16.30

Range	300	km
▶ Trip Consumption	5,6	l
Consumption	14,0	l/100km
Inst. Consumption	14,5	l/100km
Speed	62	km/h
Trip distance	10,5	km
Settings		

TRIP COMPUTER (if fitted) cont.

Consumption (average consumption)

This feature displays the average fuel consumption (in litres per 100 kilometres) since the trip computer was reset. This calculation can be reset at any time. Refer to Trip computer, Resetting, in this chapter.



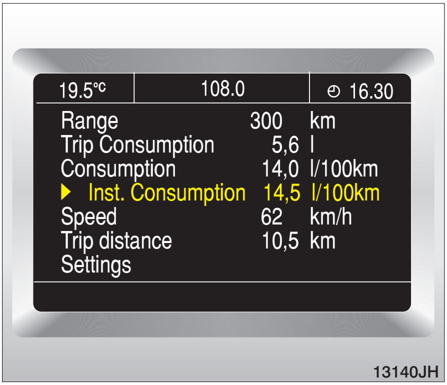
19.5°C 108.0 16.30
Range 300 km
Trip Consumption 5,6 l
▶ Consumption 14,0 l/100km
Inst. Consumption 14,5 l/100km
Speed 62 km/h
Trip distance 10,5 km
Settings

13141JH

Instant Consumption (instantaneous consumption)

This feature displays the fuel consumption at that moment. The display changes depending on speed:

- Shown in litres per hour when the vehicle speed is less than 13 km/h.
- Shown in litres per 100 km when the vehicle speed is more than 13 km/h.



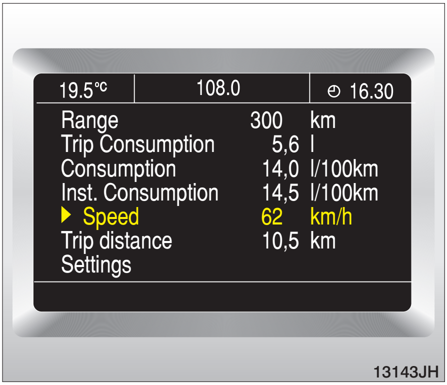
19.5°C 108.0 16.30
Range 300 km
Trip Consumption 5,6 l
Consumption 14,0 l/100km
▶ Inst. Consumption 14,5 l/100km
Speed 62 km/h
Trip distance 10,5 km
Settings

13140JH

Speed (average)

This feature displays the average speed in km/h since the trip computer was last reset; not including time that has elapsed while the ignition was off.

This can be reset at any time. Refer to Trip computer, Resetting, in this chapter.



19.5°C 108.0 16.30
Range 300 km
Trip Consumption 5,6 l
Consumption 14,0 l/100km
Inst. Consumption 14,5 l/100km
▶ Speed 62 km/h
Trip distance 10,5 km
Settings

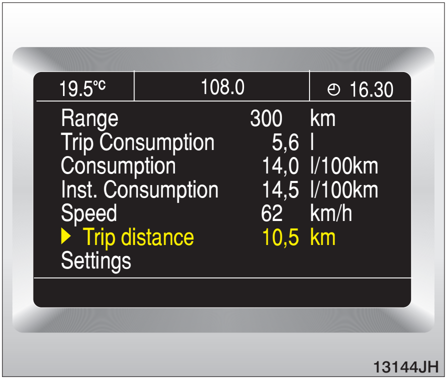
13143JH

TRIP COMPUTER (if fitted) cont.

Trip distance (distance travelled)

This feature displays the number of kilometres travelled since the trip computer was reset.

This can be reset at any time. Refer to Trip computer, Resetting, in the following information.



19.5°C 108.0 ◴ 16.30
Range 300 km
Trip Consumption 5,6 l
Consumption 14,0 l/100km
Inst. Consumption 14,5 l/100km
Speed 62 km/h
▶ Trip distance 10,5 km
Settings

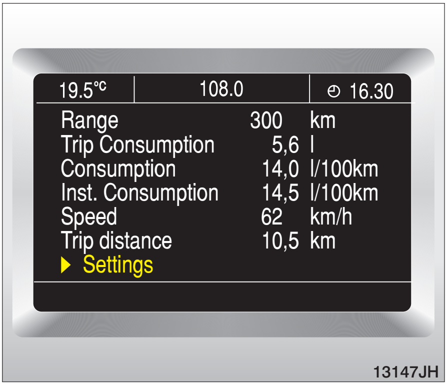
13144JH

Settings

The following trip computer calculations can be reset:

- Range (while the vehicle is stationary)
- Effective consumption
- Average consumption
- Average speed
- Distance travelled.

You can select individual items to reset or select BC-Reset all.



19.5°C 108.0 ◴ 16.30
Range 300 km
Trip Consumption 5,6 l
Consumption 14,0 l/100km
Inst. Consumption 14,5 l/100km
Speed 62 km/h
Trip distance 10,5 km
▶ Settings

13147JH

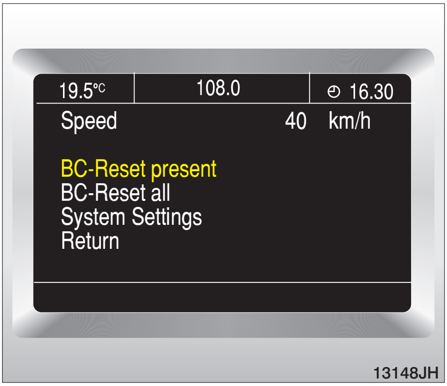
SELECT INDIVIDUAL ITEMS

1. From the trip computer menu, select the items to reset.
2. Select the Settings menu.
3. Select BC-Reset present.

The selected items are now reset and the calculations are refreshed.

If the calculations are not yet complete, '- - -' displays for the selected item.

Note: Range can be reset only while the vehicle is stationary.



19.5°C 108.0 ◴ 16.30
Speed 40 km/h

BC-Reset present
BC-Reset all
System Settings
Return

13148JH

TRIP COMPUTER (if fitted) cont.

BC-RESET ALL

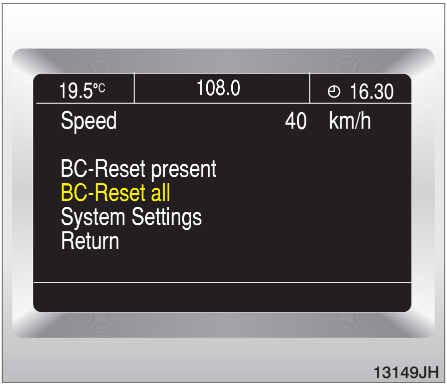
The values for the following items can be simultaneously reset:

- Effective consumption
- Average consumption
- Average speed
- Distance travelled.

1. Select the Settings menu.
2. Select BC-Reset all.

The selected items are now reset and the calculations are refreshed.

If the calculations are not yet complete, '- - -' displays for the selected item.

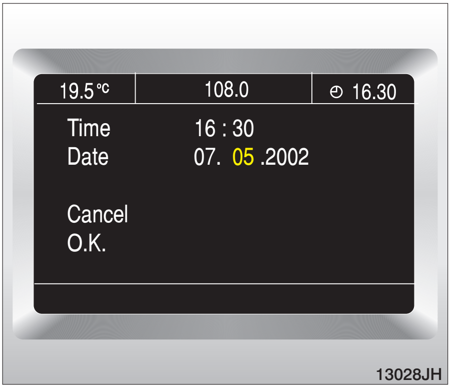

19.5°C
108.0
16.30
BC-Reset present
BC-Reset all
System Settings
Return

Speed 40 km/h

13149JH

Setting the date and time

1. Select the Settings menu.
2. Select the System Settings menu.
3. Select the Date / Time menu.
4. Select the menu item to be changed.
5. Adjust the setting using the ⌒ button on the wiper lever.
6. Set the adjustment using the ⌒ button on the wiper lever.
7. Select OK.


19.5 °C
108.0
16.30
Cancel
O.K.

Time 16 : 30
Date 07. 05 .2002

13028JH

TRIP COMPUTER (if fitted) cont.

Outside temperature

A fall in temperature is indicated immediately whereas a rise in temperature is indicated after a time delay.

WARNING:

The road surface may already be icy even though the display indicates a few degrees above 0°C.

To warn the driver that the road surface may be icy, the outside temperature display flashes when the temperature drops to less than 4°C.

This warning is cancelled when another function is selected.

When the temperature drops below –5°C, the outside temperature is displayed but the display does not flash.

Adjust the contrast

The contrast of the display window can be adjusted by selecting Contrast in the System Settings menu.

Select and confirm the desired setting.

Display mode

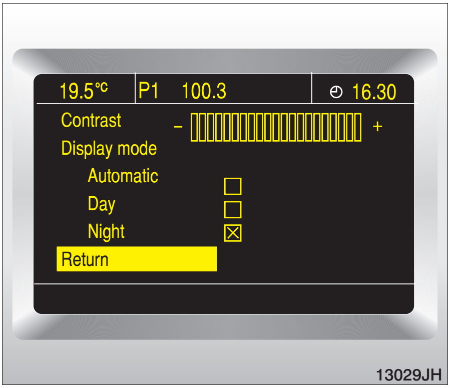
The display can be set to suit the light conditions by selecting either dark text on a light background, light text on a dark background or having the setting adjust automatically.

From the System Settings menu, select Automatic, Day or Night.

Automatic = based on vehicle lighting.

Day = dark text on a light background.

Night = light text on a dark background.

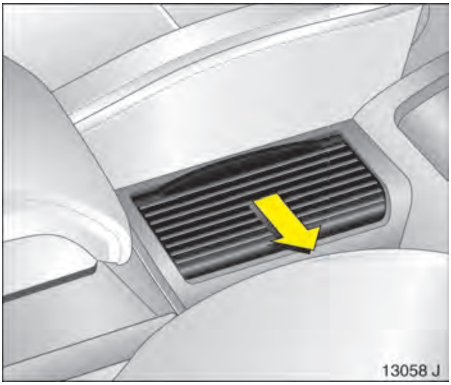

19.5°C P1 100.3 16.30
Contrast – +
Display mode
Automatic ☐
Day ☐
Night ☒
Return

CUP HOLDERS

Cup holder – front

The front cup holder is located in the centre console, between the front seats.

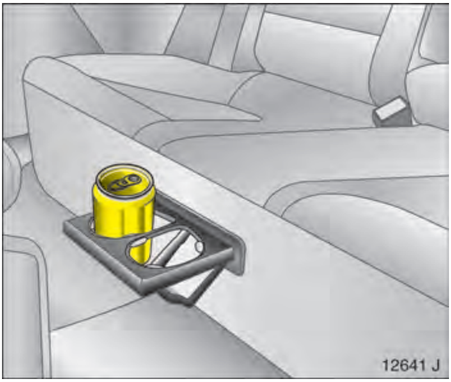
Access the cup holder by sliding the cover open as illustrated.



Cup holder – rear (if fitted)

The rear cup holder is located in the rear seat, under the centre seat cushion, as illustrated.

Access the rear cup holder by pressing the front edge.



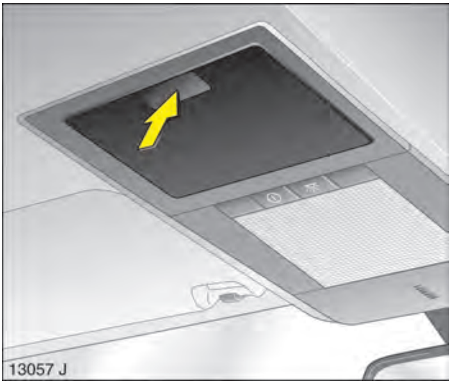
STORAGE COMPARTMENTS

Overhead sunglasses compartment (if fitted)

To open the sunglasses compartment, press the cover at the point illustrated.

Push the cover up to close the compartment.

Note: This compartment must remain closed while the vehicle is being driven.

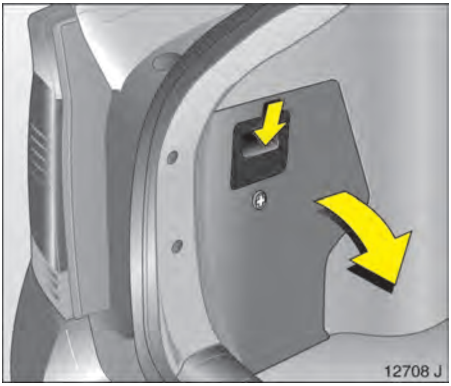


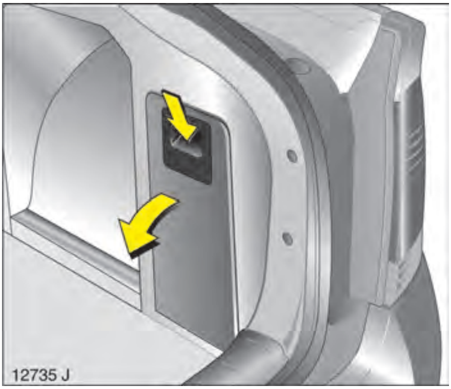
Storage compartments in the luggage area

Two compartments are located in the luggage area; one on the left-hand side and one on the right-hand side.

To open the compartment, push the bar in the recess and lift the cover out, as illustrated.

Note: Do not cover the air outlets when storing items in these compartments. Refer to Ventilation, in this chapter.





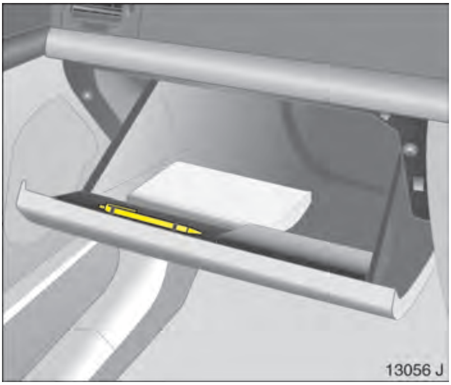
STORAGE COMPARTMENTS cont.

Glovebox

To open the glovebox lid, lift the handle upwards.

There is a pen holder at the front of the lid, as illustrated. The glovebox lamp illuminates when the lid is open.

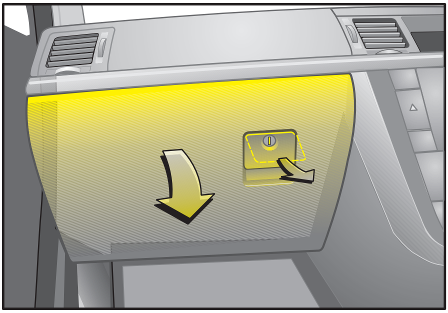
Press the lid to close the glovebox.



Glovebox lock (if fitted)

To lock the glovebox turn the key fully clockwise. To unlock the glovebox turn the key anticlockwise.

To open the glovebox, lift the handle upwards. Push the lid to close the glovebox.

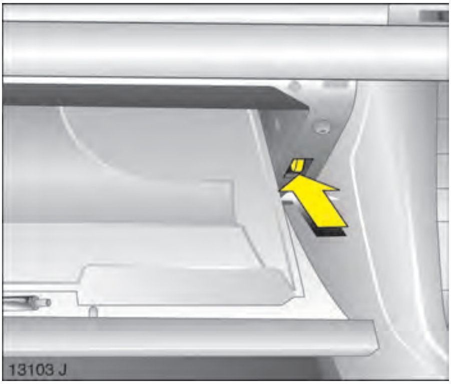


Cooled glovebox (if fitted)

Cooled air is directed into the glovebox through a vent.

Adjust the airflow with the thumb-wheel located on the right-hand side of the open glovebox, as illustrated.

If glovebox cooling is not required, turn the thumb-wheel upwards.



Front seat armrest

Refer to Chapter 3.

LIGHT SWITCHES

Light switch

Rotate the light switch dial to the required light setting:

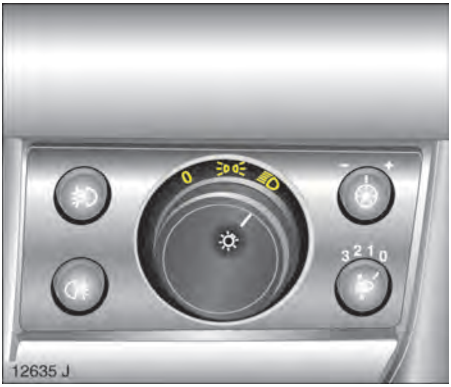
0 off

≡DC≡ park lights

≣D headlights and park lights

The tail lights and number plate lights also illuminate when ≡DC≡ or ≣D is selected.

Leaving the lights on when the engine is not running will drain the battery power. To help avoid this, a warning chime sounds when the driver's door is opened, to remind you to switch off the lights.

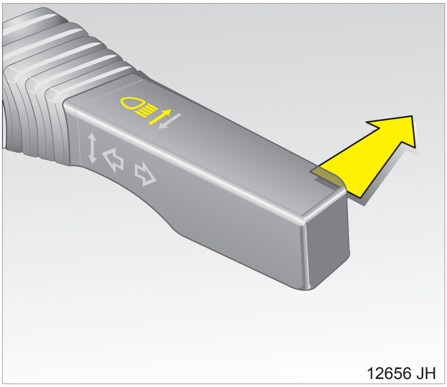


High / low beam

While the headlights are switched on (≣D), push the lever away from you, then release it. The headlights change from low beam to high beam.

Repeat this action to return the lights to low beam.

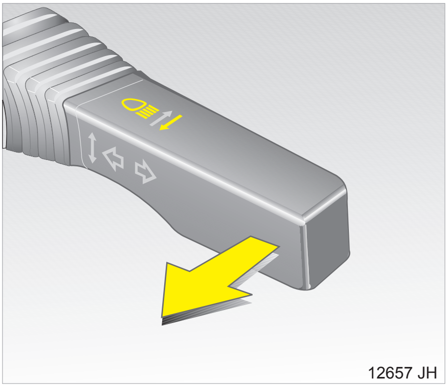
When high beam is selected, the ≣D light illuminates in the instrument panel. Refer to Warning / Reminder Lights in this chapter.



Headlight flash

It is possible to flash the high beams for signalling purposes (even if the headlights are off).

Pull the lever towards you. The high beam headlights will remain illuminated as long as the lever is held in this position.



LIGHT SWITCHES cont.

Headlight levelling

Correct adjustment of the headlight range reduces dazzle for other road users. The headlights can be adjusted to suit the load in the vehicle. Adjust the headlights using the adjustment knob, located at the bottom, right of the light switch dial.

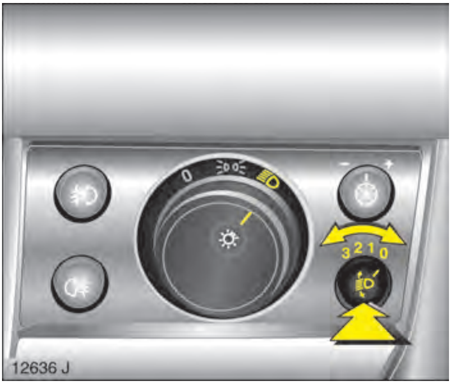
Press the ⇕D headlight adjustment knob; it will pop out to enable adjustment of the setting. Set the level based on luggage and the number occupants, as follows:

3 Driver's seat occupied and load in the luggage compartment.

2 All seats occupied and load in the luggage compartment.

1 All seats occupied.

0 Front seats occupied.



To move the headlight adjustment knob back to its original position, press the knob again.

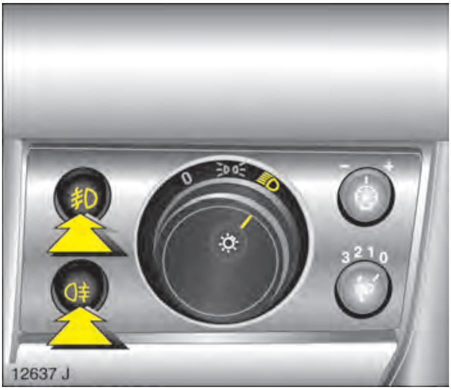
Fog lights (if fitted)

FRONT

With the ignition on and the park lights on, press the ‡D button to toggle the front fog lights on and off.

When the front fog lights are switched on, the ‡D light illuminates in the instrument panel. Refer to Warning / Reminder Lights in this chapter.

Check your state laws regarding the use of fog lights when driving.



REAR

With the ignition on and the headlights on, press the (‡ button to toggle the rear fog lights on and off.

When the rear fog lights are switched on, the (‡ light illuminates in the instrument panel. Refer to Warning / Reminder Lights in this chapter.

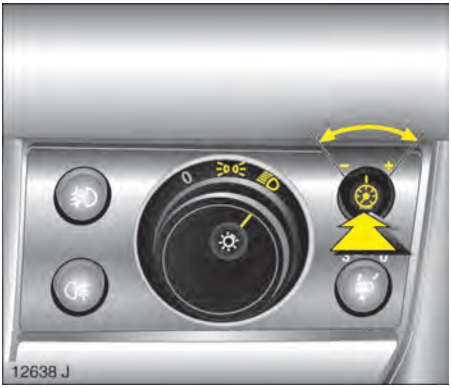
To avoid dazzling the driver behind you, rear fog lights should only be used when fog is very heavy.

LIGHT SWITCHES cont.

Instrument panel illumination

The instrument panel and information display window are illuminated when the park lights are switched on.

Press the ☼ adjustment knob; it will pop out to enable adjustment. Turn the knob to set the desired level of brightness. Press the adjustment knob again when finished.



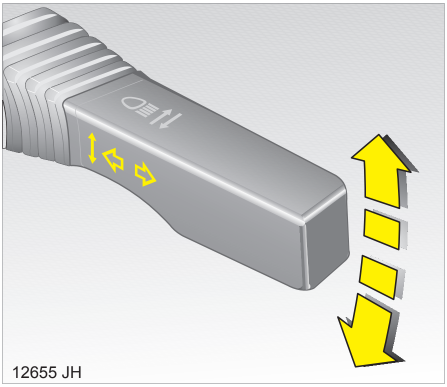
Turn signals

To signal a turn, push the lever in the direction that you intend turning the steering wheel. The lever returns to its original position when released, even though the selected turn signal is activated.

When the steering wheel returns to the 'straight-ahead' position, the turn signal cancels.

In some turns (such as changing lanes) the steering wheel is not turned enough to cancel the turn signal. In this case, move the lever part way (to the point where resistance is felt) and release it.

The turn signals flash for three cycles.



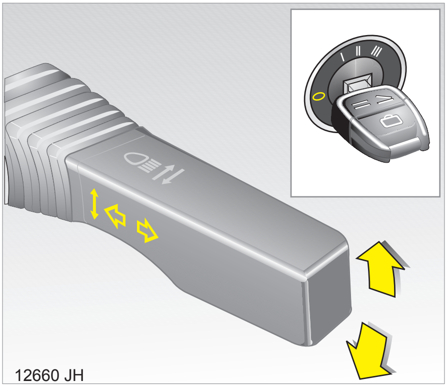
Turn signals for parking

The turn signal lights on one side of the vehicle can be illuminated when parking, as follows:

1. Turn the key to position **O**.
2. Turn the light switch to position **O**.
3. Remove the ignition key.
4. Move the turn signal lever fully up or down to select the appropriate lights.

To confirm that this feature has been set, a warning chime sounds (until the driver's door is closed), the courtesy light illuminates briefly and the selected turn signal lights (front and rear) illuminate.

The lights will turn off when the ignition is next switched on.



LIGHT SWITCHES cont.

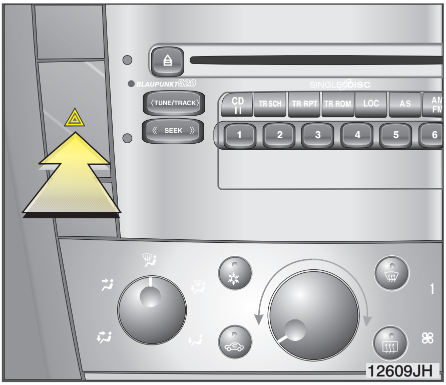
Hazard switch

Press the ⚠ button to toggle the hazard lights on and off.

If your vehicle becomes a traffic hazard, use the hazard lights, day or night, to warn other road users.

When the hazard lights are on, the ⚠ button flashes in unison with the turn signal lights.

Note: Use of the hazard lights while the vehicle is moving is illegal in some states.



Interior lights

For information on interior lights, refer to Chapter 3.

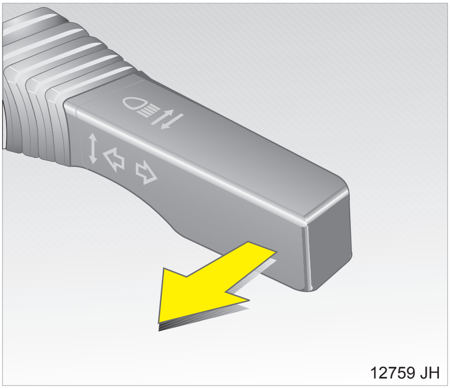
Lights off delay when leaving the vehicle

The low beam headlights and the reversing lights can be set to turn off 30 seconds after leaving the vehicle. This feature is of particular benefit when parking in unlit parking areas, driveways and garages.

After removing the ignition key and opening the driver's door, pull the turn signal lever towards the steering wheel, as illustrated.

Cancel this feature by inserting the key into the ignition.

Note: If the driver's door is left open, the lights will turn off after two minutes.



WIPERS AND WASHERS

Front windscreen wipers

Move the lever upwards to turn the windscreen wipers on or to select the next higher wiper speed. Alternatively, hold the lever up (against resistance) until the desired speed is attained.

═ fast

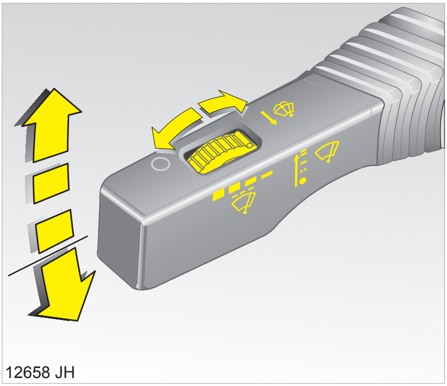
— slow

-- intermittent

O off

Move the lever downwards to select a lower wiper speed. Alternatively, hold the lever down (against resistance) until the desired speed is attained or to turn the wipers off.

The lever returns to the rest position when it is released, even though the wiper speed has been adjusted.


12658 JH

INTERMITTENT

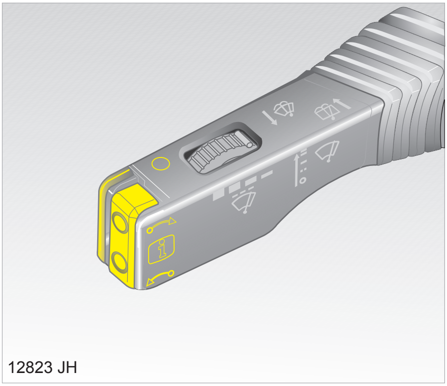
To adjust the interval of the intermittent wiper, turn the thumb wheel located on the top of the lever. For shorter intervals, turn the thumb wheel to the right. For longer intervals, turn the thumb wheel to the left.

SINGLE WIPER SWEEP

When the wipers are turned off, push the lever downwards to activate a single sweep.

Control buttons (if fitted)

Vehicle models fitted with a Graphic Information Display also feature control buttons on the end of the wiper lever. Refer to Graphic Information Display, in this chapter.


12823 JH

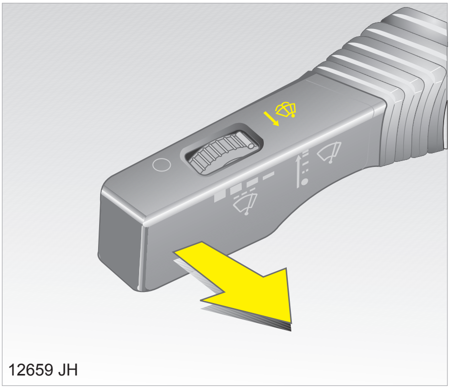
WIPERS AND WASHERS cont.

Windscreen washer

To spray washer fluid onto the windscreen, turn the ignition on and pull the wiper lever towards you.

As the washer fluid is sprayed, the wipers operate for several sweeps.

Note: Never operate the wipers on dry glass as this can damage the rubber and scratch the glass.



Rear wiper / washer (if fitted)

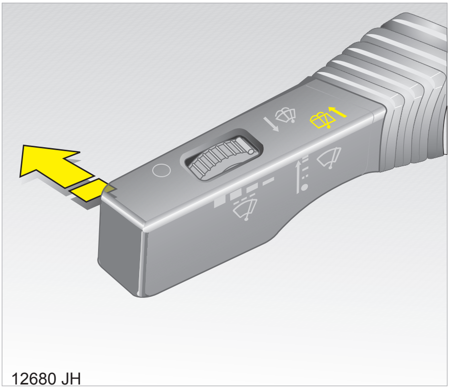
To turn on the rear wiper, push the lever forward. The lever returns to its rest position when it is released, even though the wiper setting has been adjusted.

The rear wiper sweeps in timed interval mode.

To turn off the rear wiper, repeat this procedure.

To operate the rear washer, push and hold the lever for as long as required.

As the washer fluid is sprayed, the rear wiper operates.



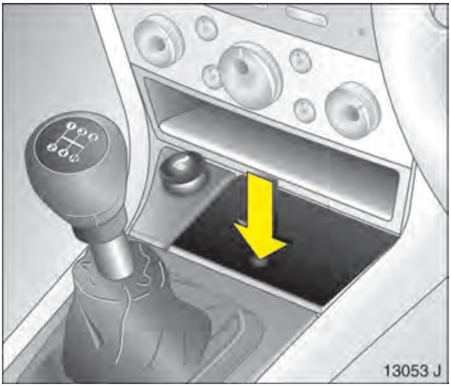
ASHTRAYS (if fitted)

Ashtrays

Ashtrays are only to be used for ash and not for combustible rubbish.

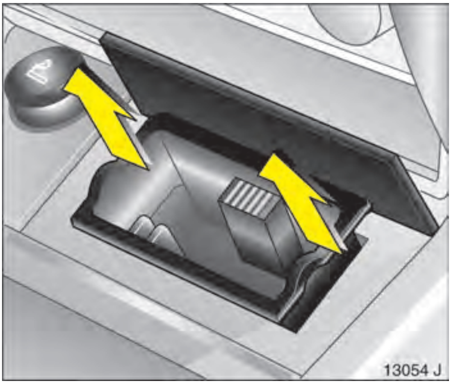
Front ashtray

To open the cover, push at the point illustrated.



To empty the front ashtray, grasp the inner container on both sides and lift it out.

Empty the ashtray and push it back in place. Push the lid to close it.



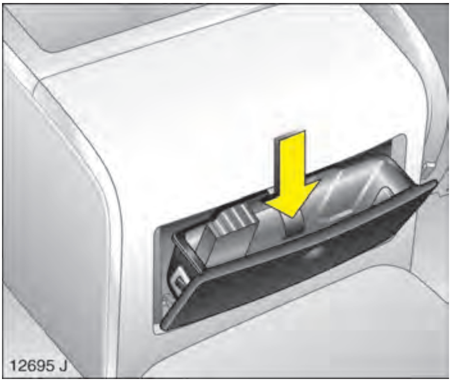
Rear ashtray (if fitted)

The rear ashtray is located in the rear centre console.

The rear ashtray opens when pressed at the front of the ashtray door.

To empty the rear ashtray, push the spring, as illustrated, and lift it out.

Empty the ashtray and push it back in place. Push the door to close it.



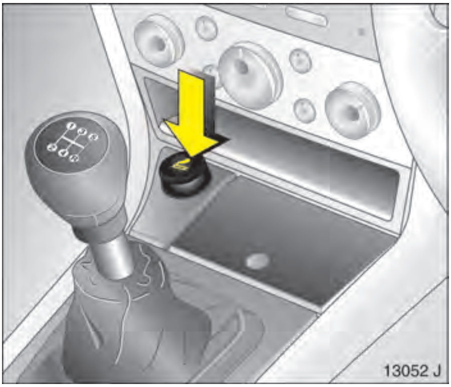
CIGARETTE LIGHTER

Cigarette lighter

The cigarette lighter is fitted in the front centre console.

To operate the lighter, turn the ignition on and press the lighter down into its recess.

When the element is hot, the lighter automatically pops out, ready for use.



VENTILATION

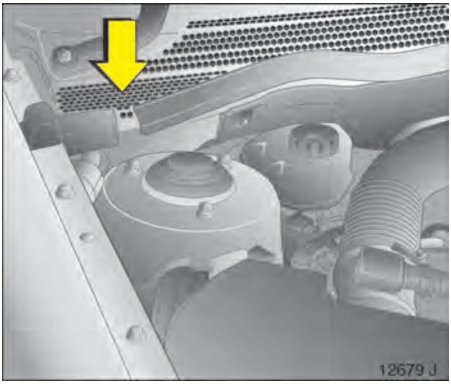
The vehicle features a flow through ventilation system, so under reasonable conditions, it should be unnecessary to open the windows. This incorporates an air mixture system: by mixing cold and hot air, the temperature can be regulated without delay and held practically constant at all air speeds.

For ventilation information specific to the climate control system (if fitted), refer to Climate Control, in this chapter.

Air intake

Outside air is drawn into the vehicle through the opening at the base of the windscreen.

Do not allow this opening to become clogged with debris, such as leaves, dirt or snow.



Pollen filter

The pollen filter is located in the air intake vent. The filter removes dust, soot, pollen and spores from the in-flowing outside air.

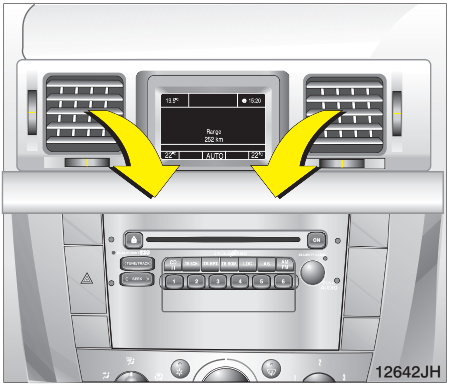
The activated charcoal coating largely eliminates odours and polluting environmental gases from the air.

Note: The filter must be replaced at the intervals specified in the Maintenance Schedule. Refer to Chapter 12.

Centre air vents

The centre vents supply air to the head area. Direct the air flow to the left or right by adjusting the horizontal wheel.

To open the vent, turn the vertical adjuster wheel upwards. Adjust the air flow up or down using the same adjuster wheel. To close the vent, turn the vertical adjuster wheel fully downwards.



Windscreen demist vents

Vents across the front of the dashboard direct air flow upwards from the base of the windscreen.

These vents are not adjustable.

Foot vents (front)

Vents in the footwell direct air flow downwards to the feet.

These vents are not adjustable.

VENTILATION cont.

Side air vents (1)

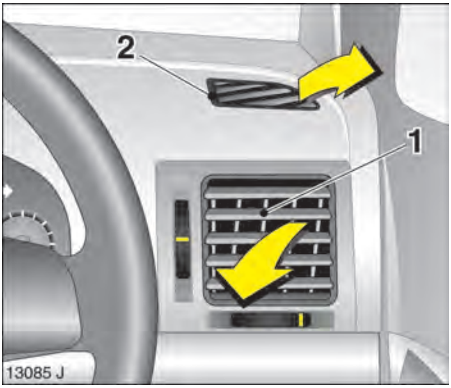
Direct the air flow to the left or right by adjusting the horizontal wheel.

To open the vent, turn the vertical adjuster wheel upwards. Adjust the air flow up or down using the same adjuster wheel. To close the vent, turn the vertical adjuster wheel fully downwards.

Side demist vents (2)

The side demist vents direct air flow to the sides of the windscreen and to the side windows.

These vents are not adjustable.

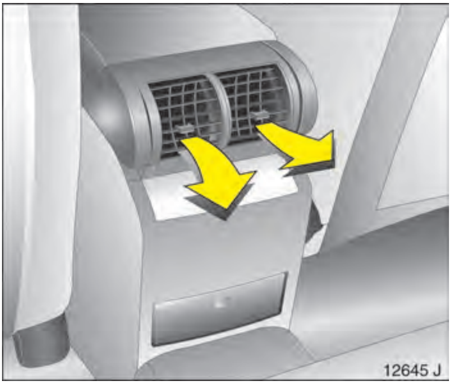


Rear console vents

The rear console vents direct air flow towards the rear seats when the front face level vents are selected.

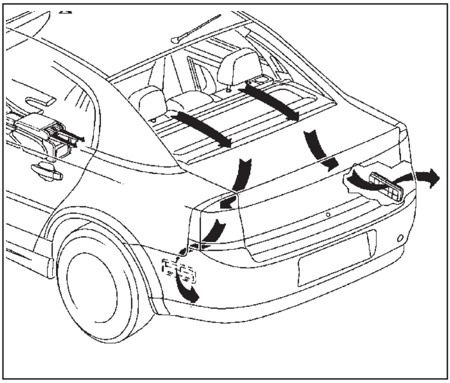
To open the vents, turn the vertical adjuster wheel upwards. To close the vents, turn the vertical adjuster wheel fully downwards.

Direct the air flow up, down, left and right by tilting and swivelling the vent fins.



Luggage area air escape outlet

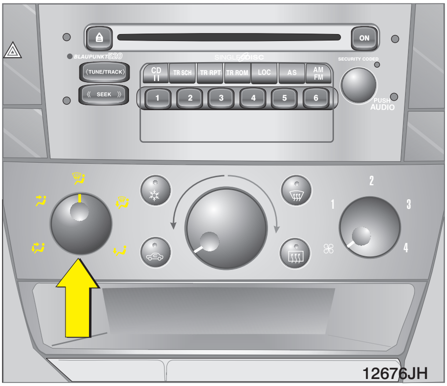
Do not block the air escape outlets when storing items in the luggage area storage compartments.



VENTILATION AND HEATING CONTROLS

For information relating to heating within the climate control system (if fitted), refer to Climate Control, in this chapter.

Vent dial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12676JH

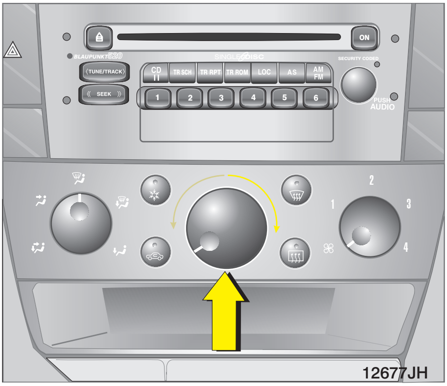
The vent dial is a rotary switch. Set this to any position at or between the symbols to select air flow distribution.

Open the vents to allow air flow when selecting or .

- Centre vents and foot vents (front and rear)
- Face level vents and rear console vents
- Windscreen and side demist vents
- Windscreen and side demist vents, foot vents (front and rear)
- Foot vents (front and rear)

When or is selected, a small amount of air is also supplied to the side air vents. Close the side air vents if this is not desired.

Temperature dial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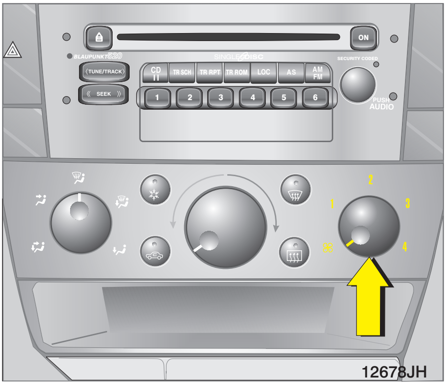
12677JH

The temperature dial is a rotary switch which is turned to adjust the mix of cold and hot air to set the temperature as desired.

Anticlockwise = cooler air.

Clockwise = warmer air.

Fan dial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12678JH

The fan dial is a rotary switch for selecting the rate of air flow.

✱ Off
1 Low
2 Medium low
3 Medium high
4 High

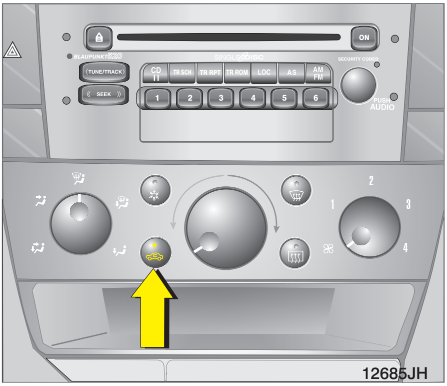
VENTILATION AND HEATING CONTROLS cont.

Air recirculation

Press the ⟲ button to switch to recirculated air intake. Press the ⟲ button again to deselect recirculation and return to fresh air intake.

When following another vehicle on dusty roads or if fumes or unpleasant odours penetrate from outside, temporarily select recirculated air. This minimises the entry of outside air.

To further inhibit the entry of dust and fumes, close the windows and turn on the fan, preferably to a high speed. This generates positive air pressure in the passenger compartment.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12685JH

If occupants are smoking, it is recommended that the fresh air position is used. Tobacco smoke adheres to the air ducts and will cause stale smelling air if recirculated.

When driving on unsealed roads where the dust is not airborne, fresh air intake.

Note: When recirculated air is selected, the humidity increases, the windows can mist up and the quality of the passenger compartment air deteriorates. This may cause the vehicle occupants to feel drowsy. Therefore, this setting is not recommended for long periods of time.

The light in the switch illuminates when recirculated air is selected.

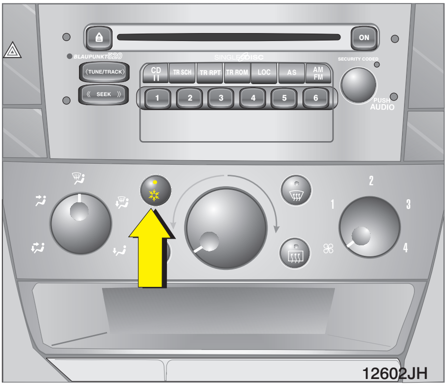
Air conditioning

For information relating to air conditioning within the climate control system (if fitted), refer to Climate Control, in this chapter.

Press the ❄ button to activate air conditioning. The fan is automatically switched on to speed 1. Press the ❄ button again to deactivate the system.

Note: Air conditioning is fully operational only when the engine is running and will automatically switch off if outside temperatures become too low.

The light in the switch illuminates when air conditioning is activated.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12602JH

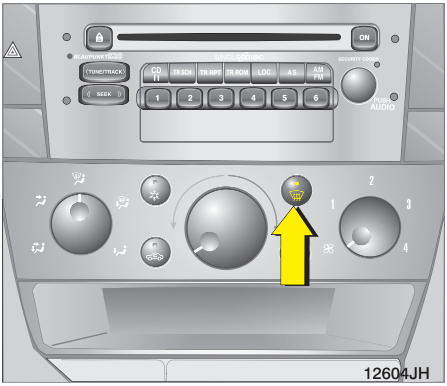
VENTILATION AND HEATING CONTROLS cont.

Windscreen demisting

Press the button to turn on windscreen demisting. Press the button again to turn off windscreen demisting.

The light in the button illuminates when demisting is on.

For further information on window demisting, refer to Air Conditioning in this chapter.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12604JH

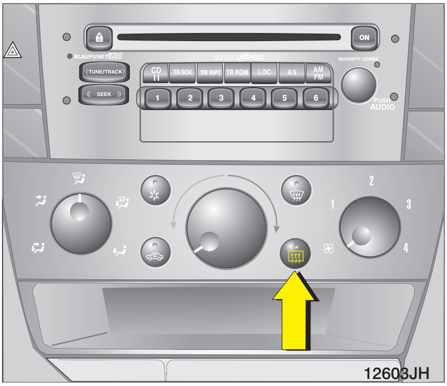
Demisting (rear window)

Press the button to turn on rear window demisting. Press the button again to turn rear window demisting off.

Note: This feature is operational only when the engine is running.

The light in the button illuminates when demisting is on.

Demisting is provided for the rear window and (on some models) for the outside mirrors.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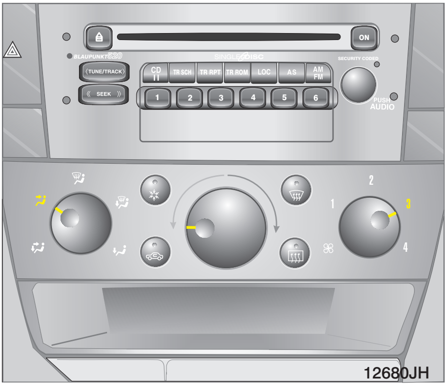
12603JH

COOLING AND HEATING SETTINGS

Ventilation without air conditioning

To conserve fuel when air conditioning is not required:

- switch off the air conditioning
- switch off air recirculation
- turn the temperature dial to cold
- set the fan speed as required
- set the vent dial to ↓→ or →
- for air flow to the rear seats, direct the front centre vents slightly towards each other and slightly upwards.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12680JH

Heating

Note: The amount of heat available is dependent on the engine temperature. Therefore, keep the vents closed until the engine has warmed up.

RAPID HEATING

For rapid warming of the passenger compartment:

- switch off air recirculation
- turn the temperature dial to hot
- set the fan to speed 3
- set the vent dial as desired.

SPLIT TEMPERATURE

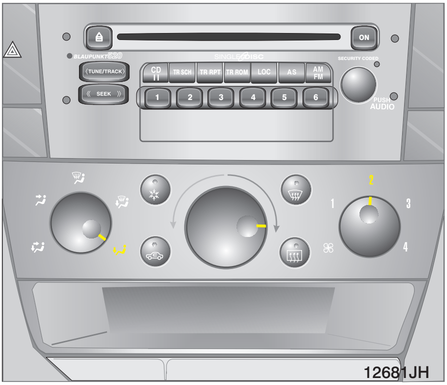
For cool air to the face and warm air to the feet (with the air conditioning switched off):

- switch off air recirculation
- turn the temperature dial to hot
- set the vents dial to ↓ or ↓→
- open the centre vents.

FOOTWELL

To heat the front and rear footwells:

- turn the temperature dial to hot
- set the vent dial to ↓
- turn on the fan.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AIR CONDITIONING

Air conditioning notes

WARNING:

The Vectra is not designed to accept non-factory fitted air conditioning systems. Fitting an aftermarket air conditioning system is not recommended by Holden and may void your New Vehicle Warranty to the extent that Holden considers the non-factory fitted air conditioning affects the specifications or quality of your Holden vehicle.

To conserve fuel, switch off the air conditioning in cold weather. However, once every month (with the engine running) switch the air conditioner on for 5 – 10 minutes, even in winter. This lubricates the air conditioning system.

Note: The air conditioning system only operates when the fan is on and in temperatures above freezing point.

At least one vent in the dashboard must be open when air conditioning is on so that the evaporator does not ice up due to a lack of air movement.

When air conditioning is activated, the air is dehumidified and the temperature is adjusted based on the temperature dial setting.

When cooling very hot air in a vehicle, open the windows for a short time, then after the hot air has escaped, close the windows. The air conditioner works most effectively with all of the windows closed.

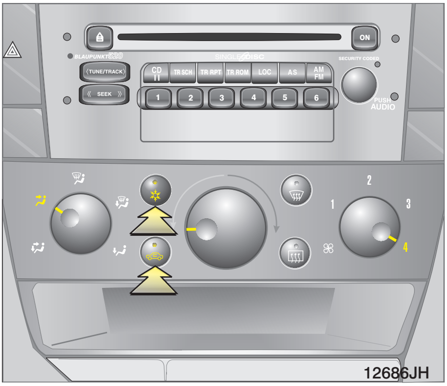
If a fault occurs with the air conditioning, have your Holden Retailer check the system.

Maximum cooling

Use these settings when the passenger compartment air is very hot. Open the windows briefly to allow the hot air to escape, then:

- switch on the air conditioning
- switch on air recirculation
- turn the temperature dial to cold
- set the fan to the highest speed
- set the vents dial to face
- open all vents.

Switch off air recirculation after a short time.



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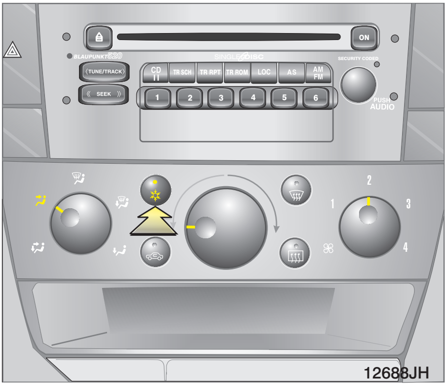
AIR CONDITIONING cont.

Normal cooling

For normal cooling:

- switch on the air conditioning
- switch off air recirculation
- turn the temperature dial to cold
- set the fan speed as desired
- set the vent dial to
- open all vents.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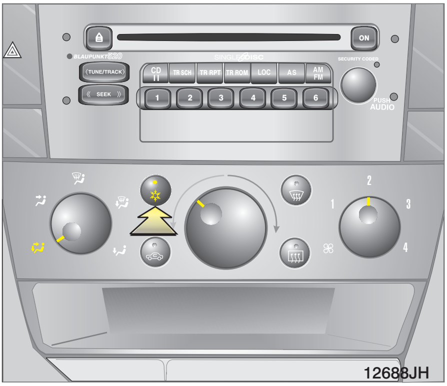
12688JH

Bi-level

For warmer air to the feet and cooler air to the face:

- switch on the air conditioning
- switch off air recirculation
- set the temperature dial as desired (not to extreme hot or extreme cold)
- set the fan speed as desired
- set the vents dial to
- open vents as desired.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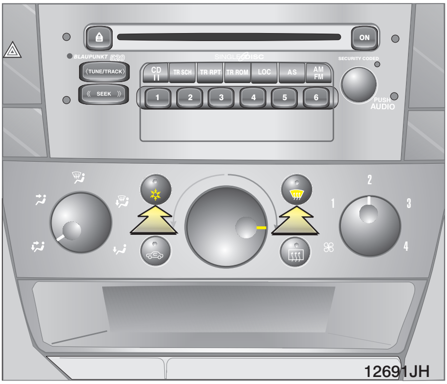
Windscreen demisting

When these settings are selected, the fan automatically switches to speed 4 and the air flow is directed to the windscreen. For windscreen demisting:

- switch on the air conditioning
- switch off air recirculation
- press the button
- set the temperature dial to warm.

Press the button again to turn windscreen demisting off. The air conditioning system reverts to the previously selected settings.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WARNING:

Disregarding these settings can cause the windows to mist up which can lead to an accident due to lack of proper vision.

CLIMATE CONTROL (if fitted)

Note: The display in your vehicle may vary slightly from the illustrations in this climate control information.

Ventilation

In AUTO mode, all of the vents except for the rear vents are automatically adjusted. Therefore, ensure the front vents are set to open while AUTO mode is selected.

To increase air supply to the front vents, close the rear vents when air flow to the rear seats is not required.

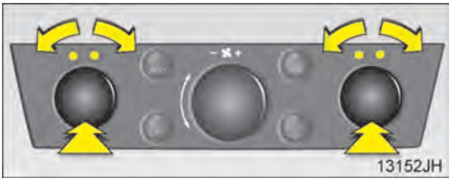
Controls

The climate control system can be set to the fully AUTO mode or influenced by manual settings. Use the following controls as well as the display window to set the climate control features.

TEMPERATURE DIALS

Turn the two outer dials, as illustrated, to preselect the desired temperatures:

- LHS dial for front passenger comfort
- RHS dial for driver comfort.



The driver and passenger temperatures can be set to different values between 16°C and 28°C. For comfort reasons, is it recommended that the difference is no more than 2°C and that adjustments are made in small steps.

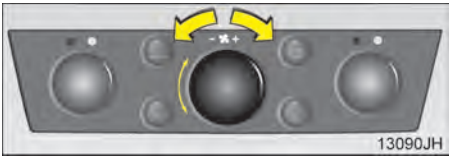
If a temperature below 16°C is selected, LO appears in the display, the air conditioning runs constantly on maximum cooling and the temperature is not regulated.

If a temperature above 28°C is selected, HI appears in the display; the air conditioning runs constantly on maximum heating and the temperature is not regulated.

To set both temperatures to the driver's setting, press the RHS dial.

These settings are retained when the ignition is switched off.

SELECTION DIAL

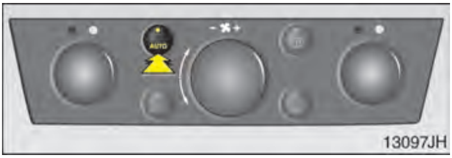


Use the centre dial to navigate through and make selections in the menu options:

- press the dial to display the options
- turn the dial to highlight the required option
- press the dial again to select or deselect.

To exit the menu levels, highlight and select Return / Back.

AUTO BUTTON – Ignition on

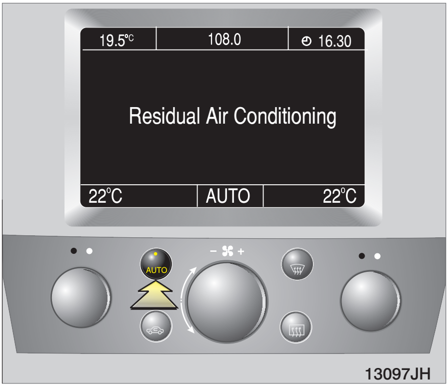


Press the AUTO button when the ignition is on to activate the AUTO mode. Refer to Select Auto Mode in the following information.

CLIMATE CONTROL (if fitted) cont.

Controls cont.

AUTO BUTTON – Ignition off

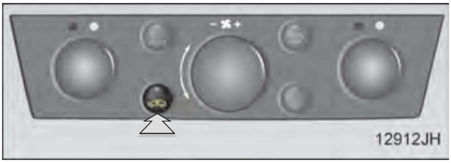


Press the AUTO button when the ignition is off to activate air conditioning without the engine running. The display reflects the system status and the light in the button illuminates.

This uses the residual heating / cooling potential that is in the system after the engine has been turned off.

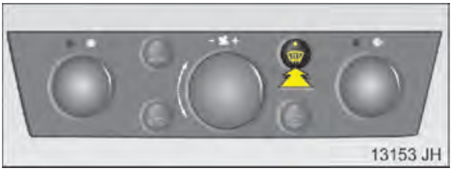
The air conditioning operates for a limited period of time in this mode. Press the AUTO button again to cancel this selection. Refer to Auto mode, following.

MANUAL AIR RECIRCULATION BUTTON



With the ignition on, press the button to manually activate air recirculation. Press the button again to deselect air recirculation. The button light illuminates. Refer to Automatic Air Recirculation in this section.

DEMIST BUTTON



With the ignition on, press the button to manually activate demisting. The button light illuminates. Press the or AUTO button again to return to AUTO mode.

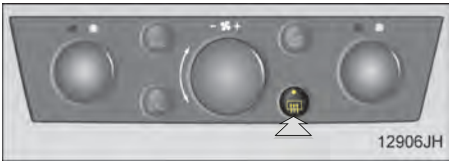
The temperature and vents are automatically set to clear the windows and the fan is switched to a high speed.

The fan speed can be manually increased or decreased by turning the centre dial.

WARNING:

Disregard of these settings can cause the windows to mist up which can lead to an accident due to lack of proper vision.

DEMIST BUTTON (REAR)



With the ignition on, press the button to activate the heated rear window. The button light illuminates.

The heating is automatically switched off after 15 minutes. To switch the heating off before that time, press the button again.

CLIMATE CONTROL (if fitted) cont.

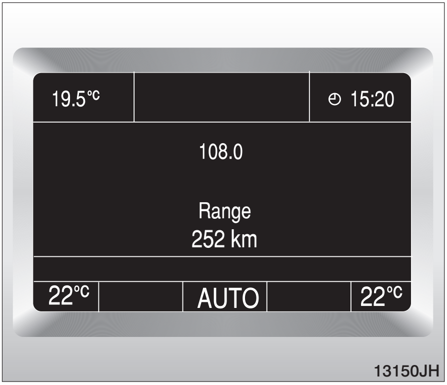
AUTO mode

To ensure a constant and comfortable climate in the vehicle, the temperature of the in-flowing air, the air flow rate and the air distribution are changed automatically when the AUTO mode is selected. The changes are made according to:

- climatic conditions outside the vehicle
- temperature changes due to external influences (such as direct sunlight)
- the personal settings selected for the driver and front passenger.

The current settings of the climate control system are shown in the display window.

Note: The climate control system is fully operational only when the engine is running and the outside temperature is above freezing point.



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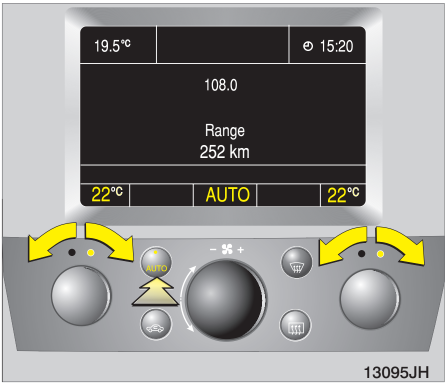
SELECT AUTO MODE

- Press the AUTO button.
- Select the desired temperature for both the driver and front passenger. A setting of 22°C is suggested.

The vents are automatically adjusted.



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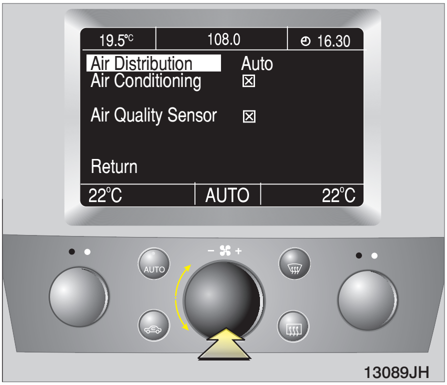
CLIMATE CONTROL (if fitted) cont.

Manual settings

The functions of the climate control system can be adjusted manually, as required. These adjustments are retained when the ignition is switched off.

To adjust the settings manually, press the centre dial with the ignition on.


19.5°C
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22°C
AUTO
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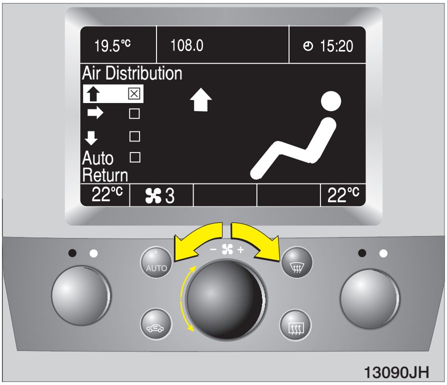
Air Distribution Auto
Air Conditioning ☒
Air Quality Sensor ☒

Use the centre dial to navigate the display menus and select, deselect or adjust the options.


19.5°C
108.0
15:20
Air Distribution
Return
22°C
3
22°C
AUTO
13090JH

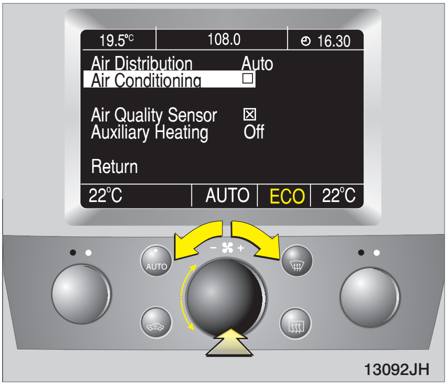
⬆ ☒
➡ ☐
⬇ ☐
Auto ☐

OPERATION WITHOUT COOLING

To conserve fuel, the air conditioning system can be turned off whenever cooling or drying of the air is not required.

Navigate to the air conditioning function and ensure this option is not selected.

The intake of air is neither cooled nor dehumidified with this selection. This restricts the level of comfort provided by the climate control system. It may allow the windows to mist up, for example.


19.5°C
108.0
16.30
Return
22°C
AUTO
ECO
22°C
AUTO
13092JH

Air Distribution Auto
Air Conditioning ☐
Air Quality Sensor ☒
Auxiliary Heating Off

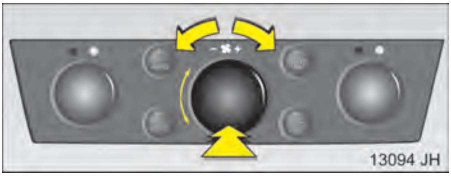
CLIMATE CONTROL (if fitted) cont.

AIR DISTRIBUTION

A selection of vents can be set to override the AUTO air distribution setting.

Navigate to Air Distribution and select the desired vents.

Select the menu AUTO option or press the AUTO button to revert to the AUTO mode.



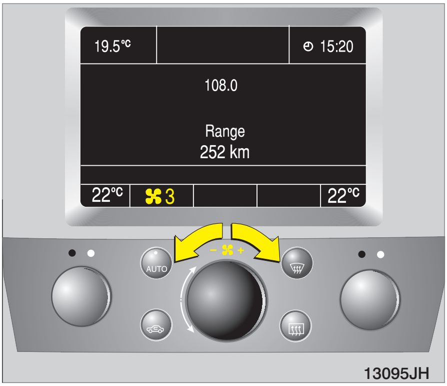
13094 JH

AIR FLOW

The selected fan speed displays. To adjust the fan speed, turn the centre dial.

If fan speed 0 is selected, the fan is switched off and the air conditioning system is disabled.

To revert to the AUTO mode, press the AUTO button.


19.5°C
15:20
108.0
Range
252 km
22°C
✻3
22°C
– ✻ +
AUTO

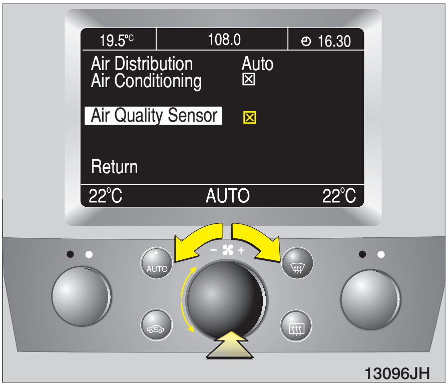
13095JH

AIR QUALITY SENSOR – AUTOMATIC AIR RECIRCULATION

Air recirculation is automatically activated as soon as the system detects harmful gases in the outside air. This circuit is controlled by an air quality sensor.

This function is disabled at low outside temperatures and when the cooling compressor is off, to prevent the windows from misting up.

Navigate to the Air Quality Sensor option and deselect it to switch from automatic air recirculation to manual control.


19.5°C
108.0
16.30
Air Distribution Auto
Air Conditioning ☒
Air Quality Sensor ☒
Return
22°C
AUTO
22°C
– ✻ +
AUTO

13096JH

RADIO, PHONE AND TILT STEERING

Operating instructions

Refer to the audio manual for operating instructions (including steering wheel remote controls).

Mobile phones and CB radios

Mobile phones and CB radio equipment which use an integrated antenna may temporarily affect the vehicle electronics when used inside the vehicle due to the interference created when transmitting. Therefore, only mobile phones and CB equipment that use an antenna fitted to the outside of the vehicle should be used. For information on installing a mobile phone kit, consult your Holden Retailer.

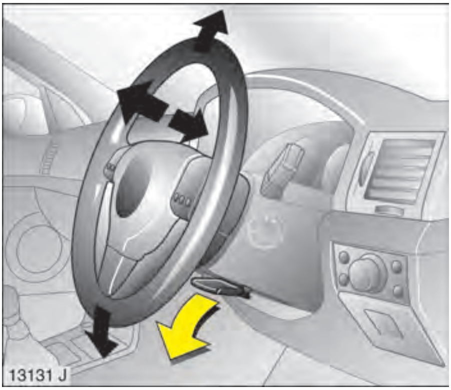
Tilt steering

With the steering lock released, move the lock lever downwards to adjust the height and reach of the steering wheel.

Push the lock lever upwards to set the adjustment, ensuring the lever clicks into position. Jiggle the steering wheel to ensure it has locked securely, before driving.

WARNING:

As with all the other driver position controls, do not adjust the steering wheel while driving.



CRUISE CONTROL

Operating cruise control

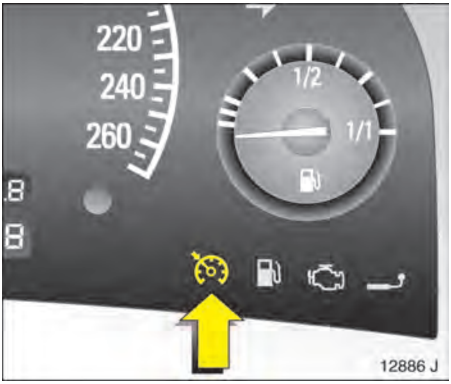
This feature makes it possible to store and maintain a constant speed (above approximately 30 km/h) without using the accelerator pedal.

WARNING:

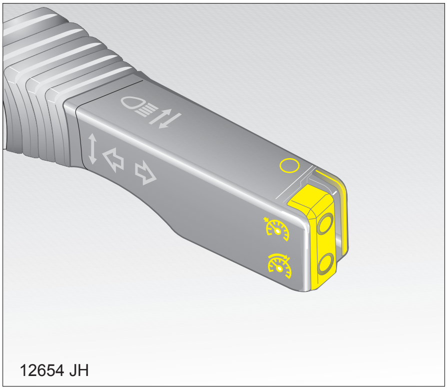
- **Do not use cruise control when the road or driving conditions could require varying speeds. A constant speed may not be practical in heavy or varying traffic or on winding, slippery or rough roads.**
- **Remember that when the cruise control is maintaining your speed, taking your foot off the accelerator pedal will not reduce the vehicle speed. To quickly deactivate cruise control, you should press the brake or clutch pedal or press the O button.**
- **When cruise control is active, reaction time may be increased due to the different position of the feet.**
- **If your vehicle is fitted with automatic transmission, it is advisable to use cruise control only when the transmission selector is in D (drive).**
- **Cruise control will not apply the vehicle brakes. Therefore, the vehicle may gain speed when going down steep hills.**
- **When climbing steep hills (particularly when towing) it is possible for the vehicle to lose speed. You may need to switch off cruise control and use the accelerator pedal.**
- **Disregard of these instructions may lead to injuries or loss of life.**

Indicator light

The reminder light in the instrument panel stays illuminated while the system is active.



CRUISE CONTROL cont.



Controls

To operate cruise control, use the , and O buttons on the turn signal lever.

Activate

1. Press the accelerator pedal until the vehicle is travelling at the desired speed (above approximately 30 km/h).
2. Tap the button.

   The light in the instrument panel illuminates.
3. Release the accelerator pedal, as cruise control maintains the selected speed.

The vehicle speed can be temporarily increased by pressing the accelerator pedal. When the pedal is released, the previously stored speed is resumed.

To increase speed with cruise control active:

To increase speed without using the accelerator pedal, hold down the button or tap it repeatedly. This increases the speed continuously or in steps of 2 km/h.

When the button is released, the selected speed is stored and maintained.

To reduce speed with cruise control active:

To decrease speed without using the accelerator pedal, hold down the button or tap it repeatedly. This reduces the speed continuously or in steps of 2 km/h.

When the button is released, the selected speed is stored and maintained.

Deactivate

Tap the O button. Cruise control is deactivated, the light in the instrument panel goes out and the vehicle slowly decelerates.

To continue driving, press the accelerator pedal in the usual way.

Cruise control is automatically deactivated when:

- vehicle speed drops below approximately 30 km/h
- the brake pedal is pressed
- the clutch pedal is pressed, or
- for vehicles with automatic transmission, the selector lever is moved to N (neutral).

Resuming the stored speed:

Tap the button at a speed above approximately 30 km/h. Cruise control resumes at the previously selected speed.

The stored speed is erased when the ignition is switched off.

BONNET

Open the bonnet

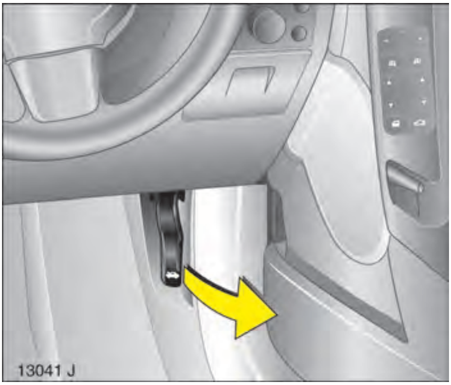
The bonnet release lever (🚗) is located beneath the right end of the dashboard.

Pull the lever to release the bonnet.

This allows the bonnet to release, but it is prevented from being fully opened due to the safety catch.

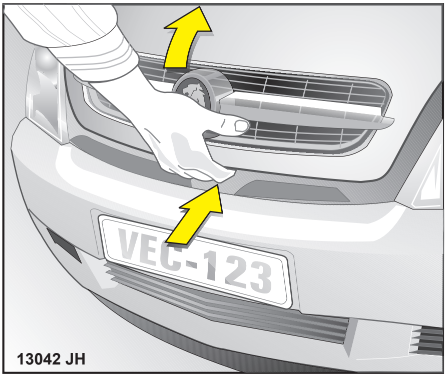
Ensure the lever fully returns to its original position.

Note: Before fully opening the bonnet, clear the bonnet of materials (ie. leaves, dirt and snow) that may slide down and obstruct the air intake.



There is a safety catch release lever on the underside of the bonnet. It is located approximately one hand width to the right of the centre of the radiator grille, as illustrated.

To open the bonnet, move the safety catch lever upwards and lift the bonnet.



Close the bonnet

Lower the bonnet gradually until it is nearly closed then allow it to fall into the lock under its own weight.

Always check that the bonnet is properly closed (by attempting to lift the front edge) and that the release lever inside the vehicle has returned to its original position.

CHAPTER 2

Locks

Page

2-2 Keys
2-4 Door locks
2-6 Deadlocking
2-7 Miscellaneous locks
2-8 Immobiliser

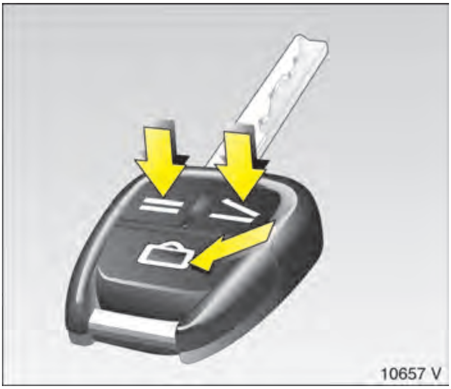
KEYS

Security codes

Your vehicle has a security card which lists various security numbers for your vehicle. Please keep the security card in a safe place, away from your vehicle.

Also take note of the key code on alloy wheels, if they are fitted with locks.

Remote control



Treat the key remote control with care; it should be protected against moisture and high temperatures, and should not be operated unnecessarily. Point the remote control at the vehicle when operating it.

Use the ═ button to lock and deadlock the doors and the boot lid / tailgate and to lock the fuel flap.

Use the ≥ button to unlock and undeadlock the doors and boot lid / tailgate and to unlock the fuel flap.

Use the ⌂ button to unlock only the boot lid / tailgate.

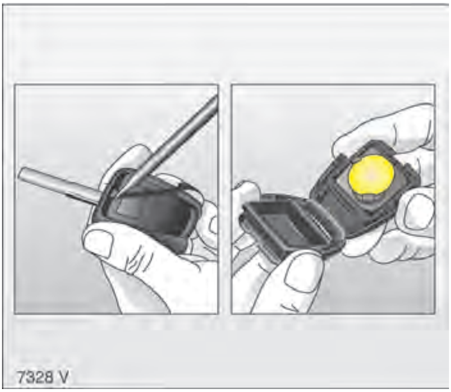
The turn signal lights flash briefly to show that the remote control is operational.

Note: Activate the remote control to open all of the doors to release the fuel flap.

Replacing the battery

The key remote control is powered by a battery. A weakening battery is indicated by a progressive loss of range. This means you must be closer to the vehicle when pressing the buttons to activate the system.

Note: Tinting the vehicle windows reduces the range of the key when the tinting material has a metallic film.



To install a replacement battery:

1. Open the battery compartment with a screwdriver, as illustrated.
2. Disengage the remote control from the battery and open the battery cover.

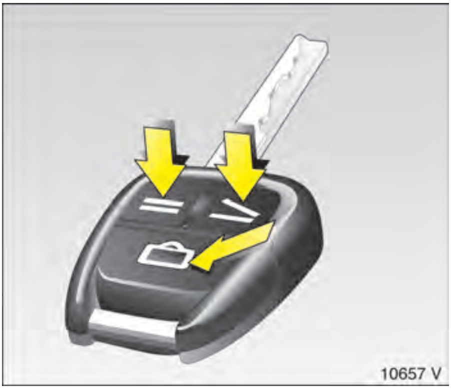
   Note: Change the battery within three minutes, otherwise the remote control will have to be reprogrammed.
3. Replace the battery, ensuring that the new replacement is inserted correctly.
4. Install the battery cover and the remote control; it clicks positively into position.

KEYS cont.

Reprogramming the key

If the key remote control malfunctions, reprogram the key:

1. Switch on the ignition. The system is now in programming mode and will remain in this mode for 30 seconds.
2. Within 30 seconds, while inside the vehicle with the doors closed, briefly press one of the buttons on the key.
3. The central locking system locks and unlocks as it reprograms the remote control.



Notes

- The remote control lock and unlock buttons may not work near high radio activity, such as under TV towers. However, the doors can be locked and unlocked by turning the key in the door lock.
- Locked doors are unlocked automatically in the event of an accident (to allow assistance from outside) provided that the ignition is not switched off.
- If the system is overloaded due to repeated operation within a short time, the power supply is cut off for approximately 30 seconds.
- If the driver's door is not closed properly, the locking system will unlock immediately after locking.
- Electric windows (if fitted) can be closed from outside the vehicle by holding the key in the lock position. Refer to Chapter 3.

DOOR LOCKS

To lock

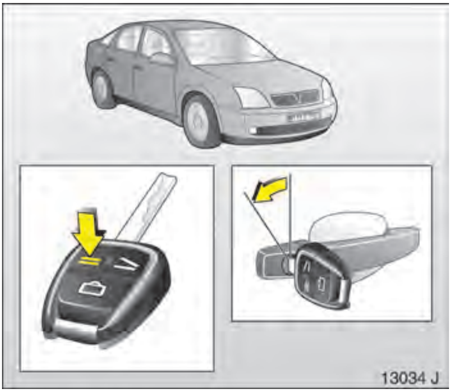
A door is locked when the lock knob in the door is pushed down.

Locking with the key remote control includes all doors, the fuel filler lock and the boot lid / tailgate. The vehicle cannot be locked using the remote if the key is in the ignition.

PREFERRED METHOD

Press the ═ button.

The turn signals flash when the remote control signal is received.



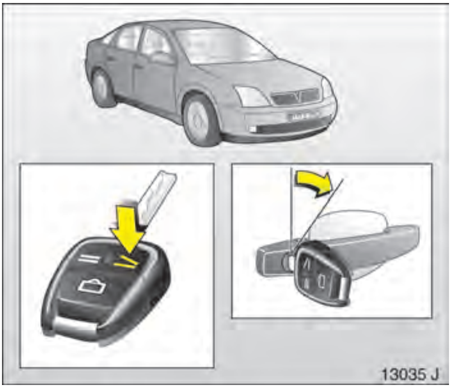
ALTERNATIVE METHOD

In the driver's door lock, turn the key towards the rear of the vehicle, then turn it back to the vertical position and remove it.

Press the door lock knobs down (pushing the driver's door lock down locks all of the doors at the same time).

To unlock

The doors are unlocked when the lock knob is pulled up. Unlocking with the key remote control includes all doors, the fuel flap and the boot / tailgate lid.



PREFERRED METHOD

Driver's door: Press the ≥ button once.

All doors: Press the ≥ button twice.

The turn signals flash when the remote control signal has been received.

ALTERNATIVE METHOD

Turn the key in the driver's door lock towards the front of the vehicle:

- once to unlock the driver's door only
- twice to unlock all doors.

UNLOCKING FROM INSIDE THE VEHICLE

Pull up the door lock knobs.

DOOR LOCKS cont.

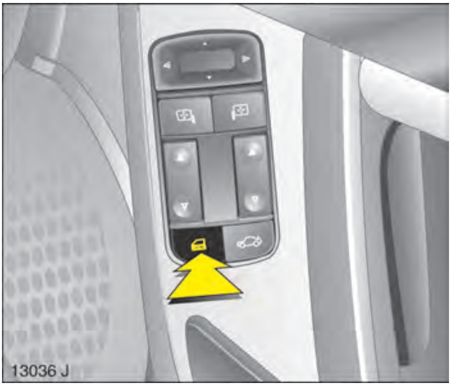
All doors switch

If staying in the vehicle, the 🔒 button (located in either front door) can be used to lock and unlock the doors.

To lock the vehicle, ensure that all doors are closed and press the 🔒 button (located in either front door).

To unlock the vehicle, again press the 🔒 button.

Note: If the deadlock is engaged, this button will not unlock the doors.



DEADLOCKING

For extra protection when leaving the vehicle, you can deadlock the doors. Deadlocking mechanically jams the electric locks so that the doors cannot be opened even if entry is gained by breaking the window glass.

WARNING:

Do not deadlock the doors if there are people in the vehicle. The doors cannot be unlocked from inside.

Engage deadlock

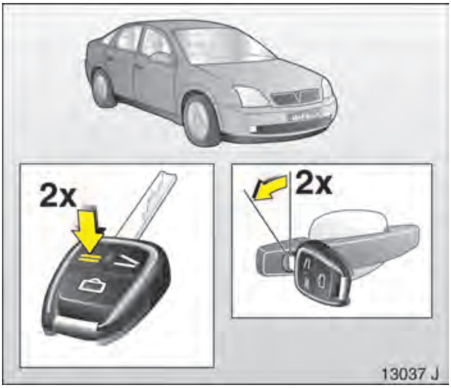
METHOD 1

Press the ═ button twice. That is, once to lock the vehicle, then again, within 10 seconds, to set the deadlock.

Note: The driver's door must have been recently opened and all doors must be closed.

METHOD 2

Turn the key in the driver's door lock to the position illustrated, twice. That is, once to lock the doors, then again to set the deadlock.



Disengage deadlock

METHOD 1

Driver's door: Press the ≥ button once.

All doors: Press the ≥ button twice.

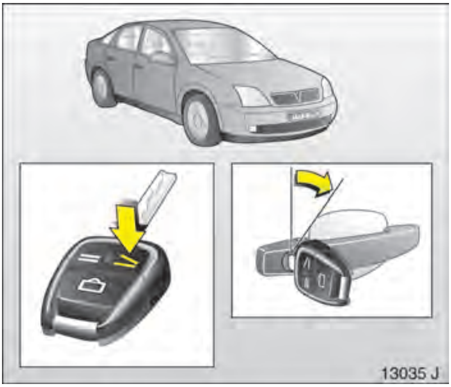
Disengaging deadlock occurs when unlocking the doors in the normal way.

METHOD 2

Turn the key in the driver's door lock towards the front of the vehicle:

- once to unlock the driver's door only
- twice to unlock all doors.

Note: Disengaging the deadlock is not possible in any other way, so keep a spare key in a safe place.



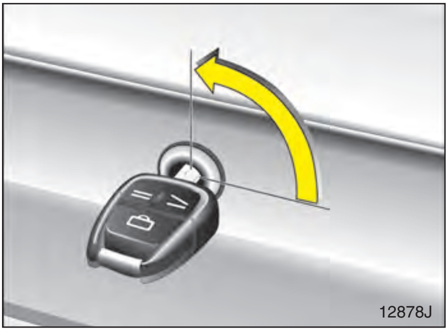
MISCELLANEOUS LOCKS

Boot lid / tailgate lock

To lock or unlock the boot lid / tailgate with the remote control, press the 🗀 button.

If the boot lid / tailgate is not opened within 30 seconds of unlocking with the remote control, it is automatically locked. When the boot lid / tailgate is open, the 🚗 light illuminates in the instrument panel.

The central locking system is not activated via the 🗀 button. However, the boot lid / tailgate can be set to function with the central locking.

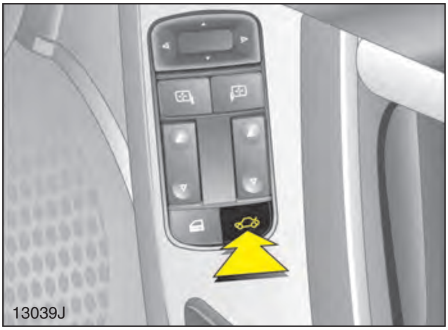


When the key slot is horizontal, the boot lid / tailgate locks and unlocks with the doors. To keep the boot lid / tailgate permanently locked regardless of the door lock position, turn the key slot to the vertical position.

To unlock the boot lid / tailgate with the key, turn the key fully clockwise. The key cannot be removed in this position.

BOOT LID / TAILGATE, DOOR SWITCH

To release the boot lid / tailgate from inside the vehicle, press the 🚗 button on the driver's door switch panel.

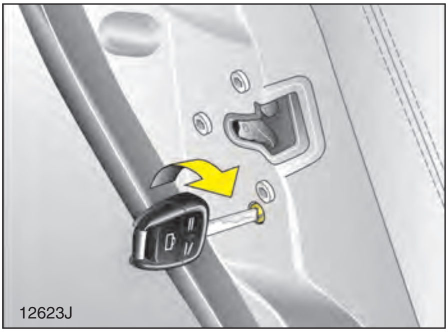


Childproof door locks

Childproof locking helps prevent the rear doors from being accidentally opened from inside the vehicle. The locks are located on the rear edge of rear doors (accessible when the door is open).

Using the key, turn the lock towards the vehicle; the door cannot be opened from inside.

The door can now only be opened by pulling up the inside lock button and then raising the outside door handle.



WARNING:

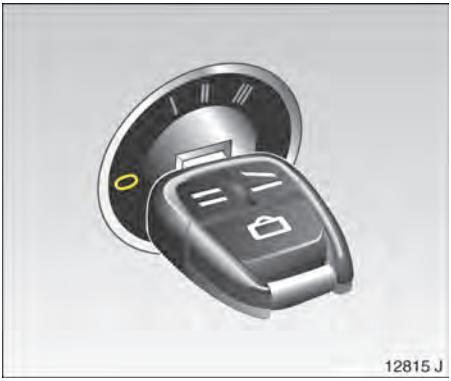
For safety, check that the childproof lock is operating correctly (after setting) by trying to open the door from inside the vehicle.

IMMOBILISER

Electronic immobiliser

The key helps to protect the vehicle from theft by means of the electronic immobiliser. The immobiliser system electronically disables the starting system.

When the key is used to start the vehicle, the system checks the key. If the key is accepted as an 'authorised' key, the starting system is enabled and the vehicle can be started.



Activate

The immobiliser is activated when the ignition is switched to **O** and the key is removed.

Deactivate

The immobiliser is deactivated when the ignition is switched to **II** (ignition on) with an authorised key.

Note: Deactivation is not possible in any other way, so keep a spare key in a safe place.

Indicator

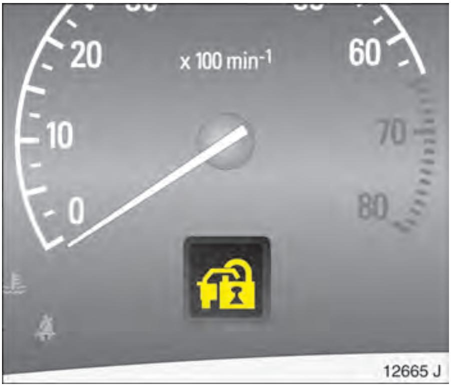
If the key is not authorised, the 🔒 light in the instrument panel illuminates and the engine cannot be started.

1. Turn the key to **O** and then remove it.
2. Insert the key into the ignition switch again.
3. Repeat the starting procedure.

If the 🔒 light continues to illuminate, try to start the engine using the spare key.

Have your Holden Retailer check the system.

Note: The immobiliser does not lock the doors.



CHAPTER 3

Know your vehicle

Page

3-2 Front seat adjustment
3-5 Rear seat adjustment
3-7 Seat belts
3-10 Child restraints
3-14 Windows
3-16 Sunroof
3-18 Interior lights
3-19 Park brake
3-20 Driver's door switches
3-21 Mirrors
3-22 Front armrest and accessory socket
3-23 Luggage compartment enlargement
3-24 Electrical system warning

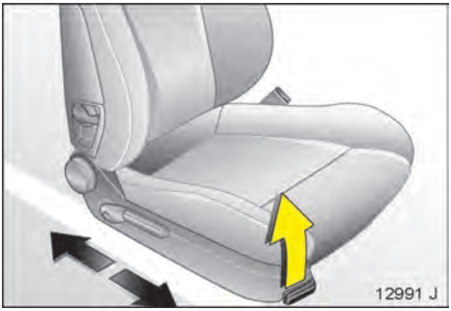
FRONT SEAT ADJUSTMENT

Forward / rearward

Lift the lever at the front of the seat then slide the seat forward or backward as desired. After releasing the lever, try to move the seat to ensure that it has locked into position.

WARNING:

Never adjust the driver's seat while driving. The seat could move suddenly and cause the driver to lose control.

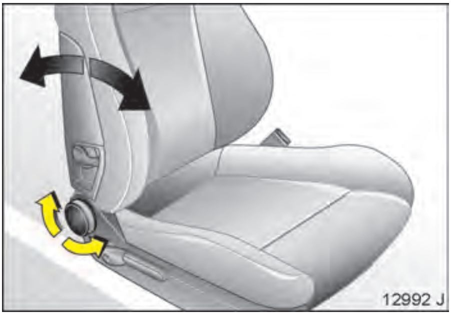


Recline / incline

To adjust the angle of the seat-back, turn the handwheel, as illustrated.

WARNING:

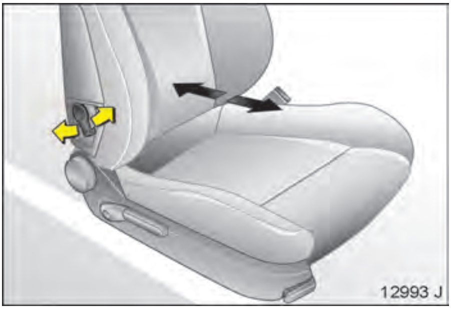
To avoid reducing effectiveness of seat belts, it is recommended that the seatbacks be reclined to no more than a semi-reclined position when the vehicle is moving. The fully reclined position should be used only when the vehicle is stationary.



Lumbar support (if fitted)

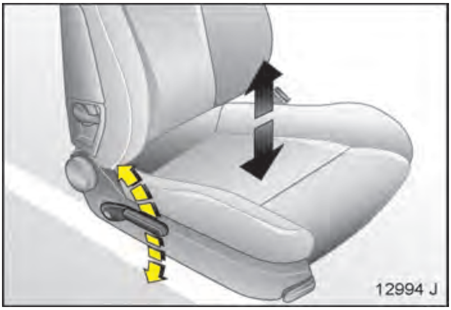
Move the lever on the door-side of the seat, as illustrated, to adjust the lumbar support.

Do not lean heavily on the seat while adjusting the lumbar support.



Height adjustment (if fitted)

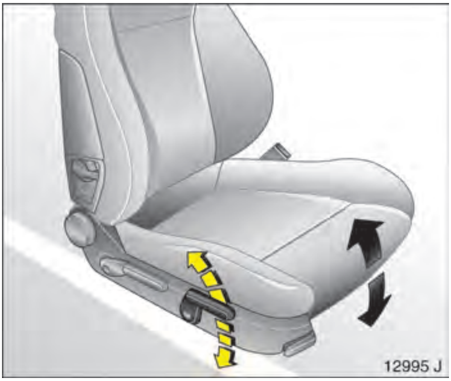
Pump the lever on the door-side of the seat, as illustrated, up to raise the seat height or down to lower the seat.



FRONT SEAT ADJUSTMENT cont.

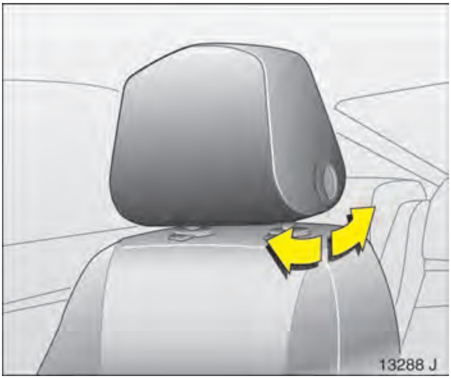
Inclination adjustment (if fitted)

Pump the lever on the door-side of the seat, as illustrated, upwards to incline the seat or downwards to bring the seat back towards level.



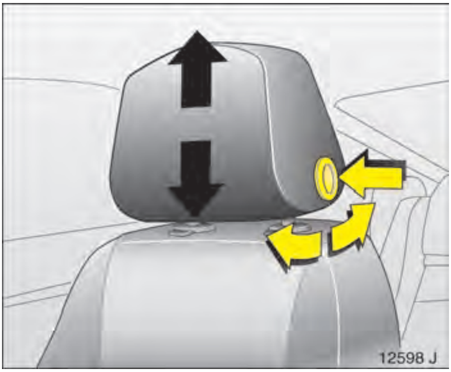
Front seat head restraints

To adjust the tilt angle of the head restraint, move the bottom of the head restraint backward or forward.



To adjust the height of the head restraint, press the release button as illustrated and raise or lower the head restraint. Release the button and continue to move the head restraint until it clicks into position.

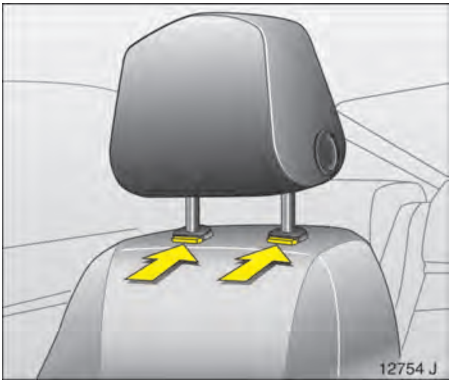
The upper edge of the head restraint should be level with the top of the head; never at neck level.



FRONT SEAT ADJUSTMENT cont.

Front seat head restraints cont.

To remove a head restraint, press the release buttons, as illustrated, and lift the head restraint out.



Active head restraints

In the event of a rear-end impact, the active head restraints (on the front seats) automatically tilt forwards. The head is more effectively supported by the head restraint and the risk of neck injury is reduced.

WARNING – SIDE IMPACT AIRBAGS

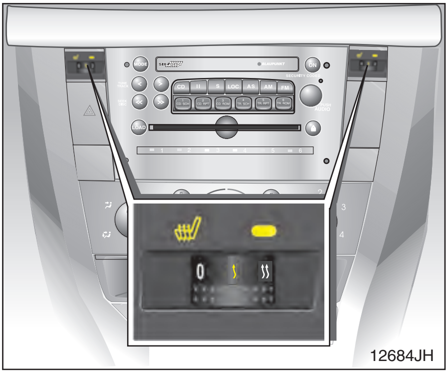
Do not fit unauthorised seat covers as they may impair the deployment of the side impact air bags. Do not position your body or any object (including pillows) between front seats and doors. Front seat occupants should not lean on or sleep against the door.

Front seat heating (if fitted)

Seat heating is available when the ignition is switched on. Two adjustment wheels are located below the centre air vents, with a control indicator above each wheel.

Turn the appropriate wheel to set the driver or passenger seat heating to the required level.

To switch the heating off, adjust the wheel to the **0** setting.



REAR SEAT ADJUSTMENT

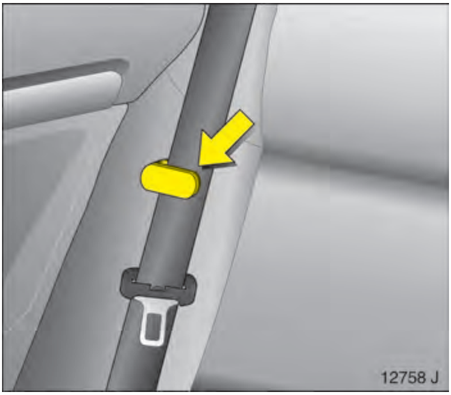
Rear seat adjustment

The rear seat can be folded into different positions. To avoid injury from passing traffic, never stand on the road-side of the vehicle when converting the rear seat. Refer to Chapter 10 for notes and precautions about loading your vehicle.

Folding seats

Before folding the rear seats:

- lower the rear seat head restraints
- place the belt buckles into the storage pockets in the seat cushions
- ensure that the lockable seat backs (if fitted) are unlocked
- move the front seats forward, as required.



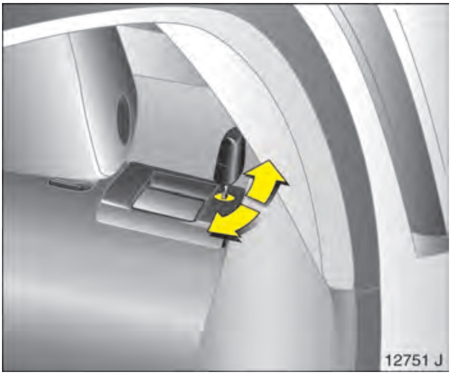
Lockable backrests (if fitted)

These help prevent unauthorised access to the luggage compartment from the inside of the vehicle.

Rotary fasteners are located in the luggage compartment on the rear of the backrests and on the cover behind the centre armrest.

TO LOCK: Ensure the seats and centre armrest are fully upright and turn the fasteners 90° clockwise.

TO UNLOCK: Turn the fasteners 90° anticlockwise.



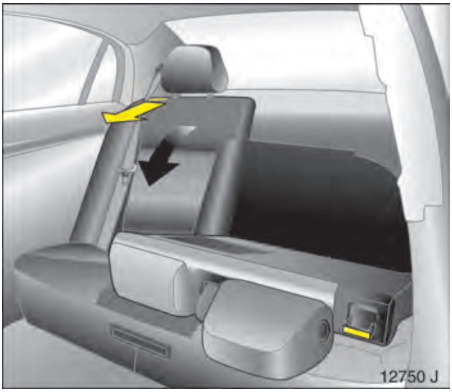
REAR SEAT ADJUSTMENT cont.

1. Unlatch the seat-back by lifting the lever at the top of the outer seat.
2. Fold the seat-back forward onto the seat cushion.

RETURN TO UPRIGHT

When returning the rear seats to upright, ensure that the seat belts are not trapped and that the seats audibly click into position.

Note: The three point seat belt for the centre seat can be pulled out of the retractor only when the seatbacks are correctly in position.

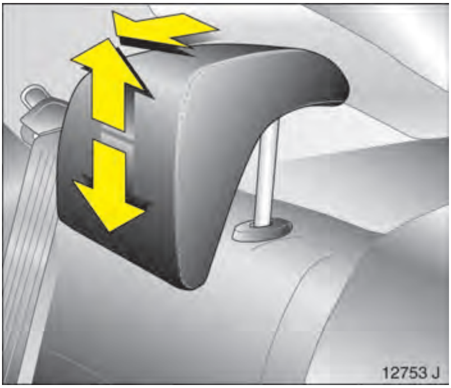


Rear seat head restraints

To adjust the height of the head restraint, pull up the rear of the head restraint to raise it. Push it down firmly to lower it.

The upper edge of the head restraint should be level with the top of the head.

To remove the head restraints, release both of the locking springs, located at the rear of the head restraint, while pulling upwards.



Rear centre head restraint

If the centre seat is not occupied, push the head restraint down to its lowest position to improve the rear view: press the locking springs in and push the restraint down.

If the seat is occupied, set the head restraint height based on the passenger's height.

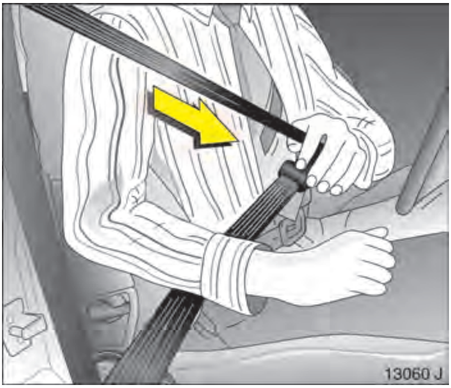
SEAT BELTS

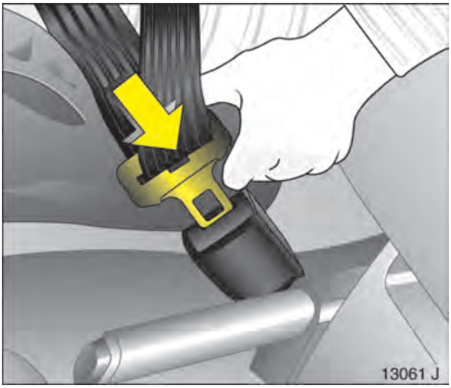
Lap-sash belts

To put on a lap-sash seat belt, pull the metal tongue across your body and clip it into the buckle. The metal tongue locks correctly into place with a click. After fastening the seat belt, settle it at the hip, then tension the belt by tugging the sash upward. Any extra belt length retracts automatically.

The lap section should be worn as low as possible on your hips; not on your waist. Make sure the sash and lap sections of the seat belt are free from twists and fit firmly.

The emergency locking retractor belt allows you to move freely while the vehicle is travelling normally. The belt will lock immediately on fast braking, impact with a solid object or any quick movement by the wearer.

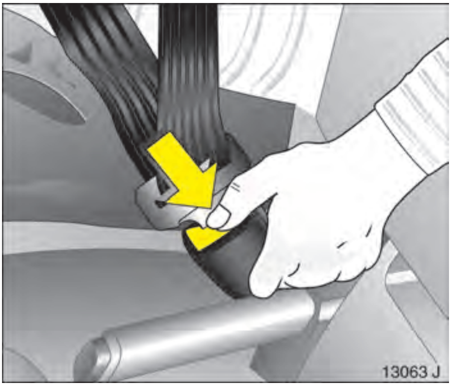




Seat belt warning chime

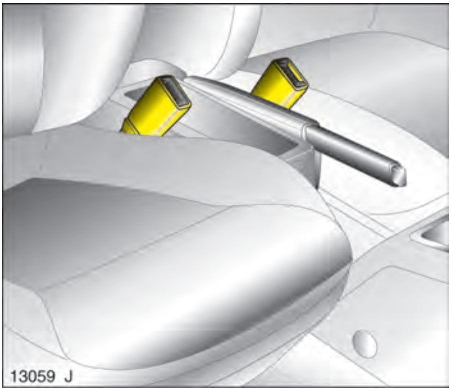
For information on the operation of the seat belt warning light and chime, refer to Chapter 1.

To undo the belt, press the release button on the buckle and allow the belt to retract. Check that it fully retracts without twisting or turning.



SEAT BELTS cont.

Seat belt pretensioners



The seat belt system (with the exception of the centre rear seat belt) incorporates one-use-only belt pretensioners.

In the event of a moderate to severe head-on or tail-end collision, the belt buckles are pulled downwards, instantly tightening the belts.

If the belt pretensioners have been actuated, the symbol illuminates and yellow tabs become visible on the buckles.

Note: Although the seat belt may remain operational (apart from this feature), the entire system must be replaced by a Holden Retailer.

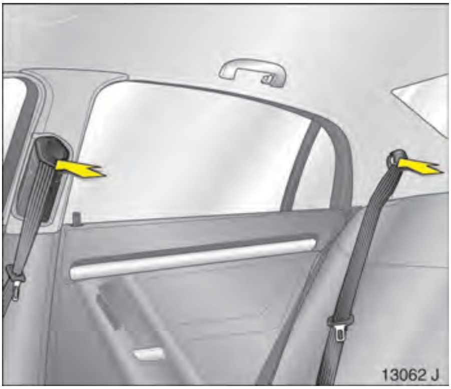
To check that the bulb is working, the light illuminates for a few seconds when the ignition is switched on. If it does not go out or if it comes on during driving, there is a defect in the system and the belt pretensioner and / or the airbag systems might not work in an accident. Have a Holden Retailer check the systems as soon as possible.

To prevent malfunctions, do not place magnetic objects in the immediate vicinity of the centre console, where the electronics for the system are located.

WARNING:

The belt pretensioners may trigger suddenly and cause injury if they are handled incorrectly. Therefore, front seats and belts should only be removed, disposed of and replaced by a Holden Retailer.

Seat belt height adjustment



1. Pull the belt slightly outwards.
2. FRONT

   Slide the guide upwards, or press the button, as illustrated, to slide the guide down.

   REAR (outboard seats only)

   Press and hold the belt guide, as illustrated and slide the guide down or up, as required.
3. Release the belt guide at the required position, ensuring that it has clicked into position.
4. Shorter people should select a lower belt guide position and tall people should select a higher one. This ensures, for both safety and comfort, that the webbing of the seat belt fits on the shoulder.

Note: Do not adjust the seat belt height while driving.

SEAT BELTS cont.

Australian law requires that the driver and all passengers be properly restrained at all times with the seat belts provided in the vehicle. Failure to do so could increase the chance of injury and / or the severity of injury in accidents.

WARNING:

- **Seat belts are designed to bear upon the bony structure of the body, and should be worn low across the front of the pelvis or the pelvis, chest and shoulders, as applicable; wearing the lap section of the belt across the abdominal area must be avoided.**
- **Seat belts should be adjusted as firmly as possible, consistent with comfort, to provide the protection for which they have been designed. A slack belt will greatly reduce the protection afforded to the wearer.**
- **Care should be taken to avoid contamination of the webbing with polishes, oil and chemicals, and particularly battery acid. Cleaning may safely be carried out using mild soap and water. The belt should be replaced if webbing becomes frayed, contaminated or damaged.**
- **It is essential to replace the entire assembly after it has been worn in a severe impact, even if damage to the assembly is not obvious. Belts should not be worn with straps twisted.**
- **Each seat belt assembly must only be used by one occupant; it is dangerous to put a belt around a child being carried on the occupant's lap.**
- **No modification or additions should be made by the user which will either prevent the seat belt adjusting devices from operating to remove slack, or prevent the seat belt assembly from being adjusted to remove slack.**
- **The positioning of the tongue restrictor must never interfere with, or stop, the belt from fully retracting.**
- **On pregnant women in particular, the lap belt must be positioned as low as possible across the pelvis so as not to put too much pressure on the abdomen.**

CHILD RESTRAINTS

Child restraints

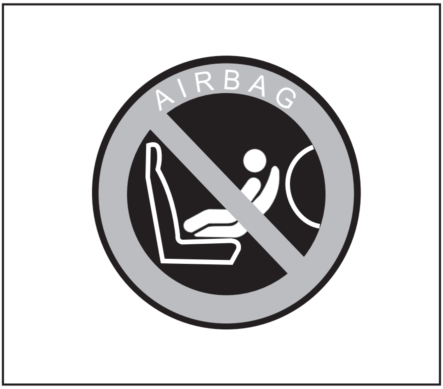
Always ensure that the seat belt fits firmly around the child restraint. If a child cannot see out of the window, do not raise the child by means of an ordinary cushion. It will not stay in place in a collision and the child can slip out of the straps and become entangled.

WARNING:

- **Child restraint anchorages are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seat belts, harnesses or for attaching other items or equipment to the vehicle.**
- **Only child restraints that have clips to attach to the vehicle's anchorage fittings are to be used (refer to the illustrations on the following pages).**
- **Earlier types of child restraints may not attach securely to this type of anchor and should not be used.**
- **Only Standards Australia approved child restraint harnesses should be used. You should only purchase a child restraint which carries the appropriate Standards Australia sticker of approval. Consult your Holden Retailer for advice about the various types of approved child restraints available.**
- **Do not fit unauthorised covers as they may impair the deployment of the Side Impact Airbags. Do not position your body or any object (including pillows) between fronts seats and doors. Front seat occupants should not lean on or sleep against the door. Always sit centrally in the seat. (Refer to Airbags in Chapter 6.)**

WARNING – EXTREME HAZARD:

- **Do not use a rearward facing child restraint on a seat protected by an airbag in front of it. The child could be seriously injured if the airbag inflates, as the child's head would be very close to the inflating airbag.**
- **NEVER install a child restraint in the front seat of a vehicle fitted with Side Impact Air Bags (SIAB). Remember that it is safest for children to be seated in the rear seats.**



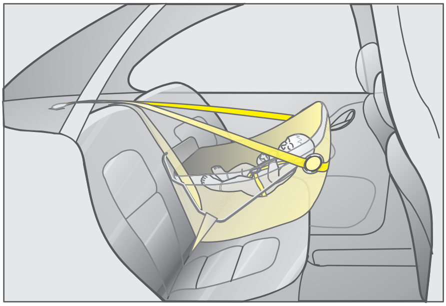
WHICH TYPE OF CHILD RESTRAINT FOR YOUR CHILD?

Children should be restrained at all times and fitted with a child restraint appropriate to their size when travelling in a vehicle. Following are some guidelines about selecting the appropriate restraint for your child.

Infants

Rearward facing infant capsule		
Weight	**Height**	**Approx. Age**
Less than 9 kg	Less than 70 cm	Up to 6 mths

Designed so that in the event of a collision, impact forces will be evenly spread over the baby's back, with minimal jarring to the vulnerable head and neck area.

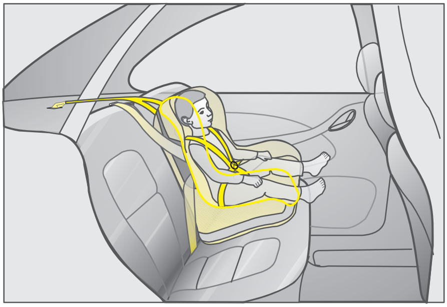


Rearward facing infant capsule

Young children

Forward facing child seat		
Weight	**Height**	**Approx. Age**
8 to 18 kg	70 to 100 cm	6 mths to 4 yrs

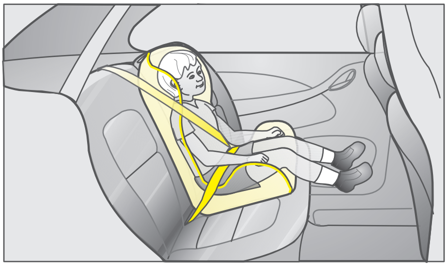
For use when the child is able to sit and easily hold his or her head upright. It is also possible to purchase convertible seats which can be used as a rearward facing child restraint or converted to a forward facing child seat.



Forward facing child seat

Booster seat with lap / sash seat belt		
Weight	**Height**	**Approx. Age**
–	More than 100 cm	4 to 10 yrs

When children outgrow a typical forward-facing child seat but they are still too small for lap-sash seat belts. A booster seat raises the child so that the knees bend comfortably, the lap-sash seat belt is correctly positioned and the child can see out the window. A rigid booster seat with a back, side wings and sash guide gives the best protection. In assessing the range of children who would benefit from booster seats, height is a better indicator than age or weight.

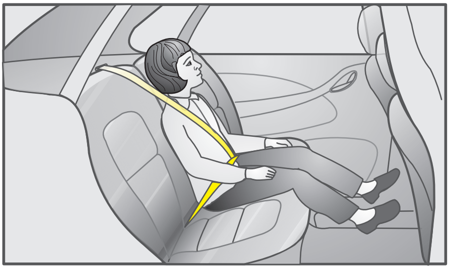


Booster seat with lap-sash seat belt

Older children

A child should use a normal lap-sash seat belt only when:

- he / she can sit against the back of the rear seat with knees bent comfortably at the edge of the seat,
- lap belt rests low and snug across the hips – not across the stomach,
- sash belt is centred on shoulder and chest,
- he / she is able to stay seated like this for the entire trip.



Adult lap-sash seat belt

CHILD RESTRAINTS cont.

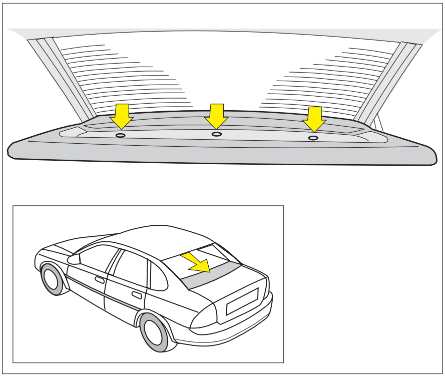
Sedan model

Three anchorage positions are provided in the area behind the rear seats, as illustrated. One anchorage fitting is installed in the centre position, protected by a flip top cover.

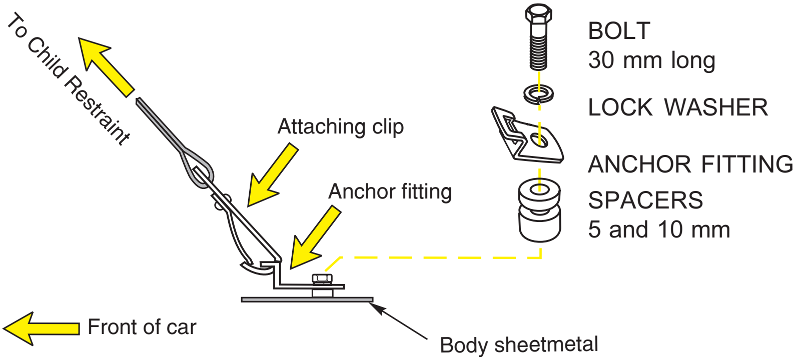
If you wish to use a child restraint in either of the outer positions, first lift the flip top cover in the outer position. The existing anchorage fitting (supplied in the centre position) can then be moved to an outer anchorage position. Alternatively, an additional anchorage fitting can be installed using the bolt, spacers and washer supplied.

Note: Remove the cover cap from the restraint assembly if the Holden accessory rear blind is fitted.

Ensure that the bolts are securely tightened to 15 – 25 Nm (Newton metres). Check with your Holden Retailer if you are unsure.



Sedan


To Child Restraint
Attaching clip
Anchor fitting
Front of car
Body sheetmetal
BOLT
30 mm long
LOCK WASHER
ANCHOR FITTING
SPACERS
5 and 10 mm

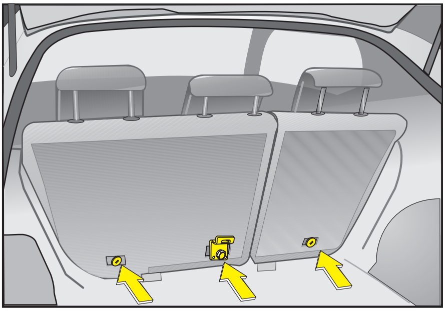
CHILD RESTRAINTS cont.

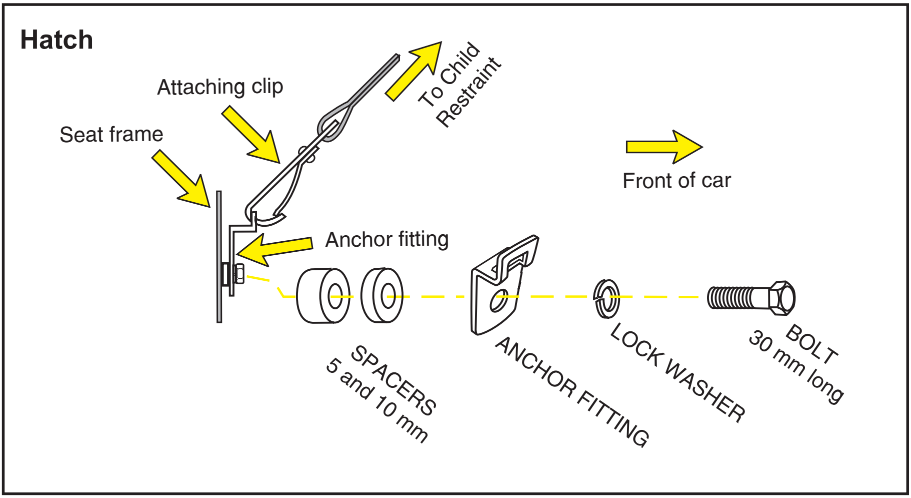
Hatch model

Three anchorage positions are provided on the rear seat-backs, as illustrated. One anchorage fitting is installed in the centre position.

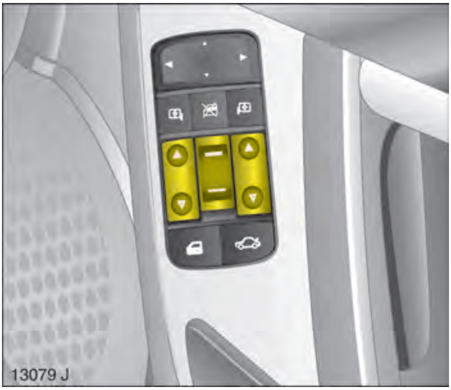
If you wish to use a child restraint in either of the outer positions, first remove the cover plug from the outer position. The existing anchorage fitting (supplied in the centre position) can then be moved to an outer anchorage position. Alternatively, an additional anchorage fitting can be installed using the bolt, spacers and washer supplied.

Ensure that the bolts are securely tightened to 15 – 25 Nm (Newton metres). Check with your Holden Retailer if you are unsure.




Hatch
Attaching clip
To Child Restraint
Seat frame
Front of car
Anchor fitting
SPACERS
5 and 10 mm
ANCHOR FITTING
LOCK WASHER
BOLT
30 mm long

WINDOWS



Switches

The control panel in the driver's door incorporates the following window switches:

- two rocker buttons (to raise and lower the window)
- a slider (to toggle between the front and rear windows)
- a safety switch (to deactivate the rear window switches).

Additional rocker switches are located in the passenger doors.

Operation

The windows can be operated:

- when the ignition is on
- within 10 minutes of switching the ignition off
- within 10 minutes of opening or closing the driver's door
- within 10 minutes of inserting or removing the ignition key.

The windows cannot be operated ater the vehicle has been locked with the remote control.

To move a window in stages, tap the appropriate window rocker switch. For automatic opening or closing, keep the switch pressed for slightly longer. To stop automatic operation, tap the switch.

When using the driver's door window switches, first use the slider to select front or rear windows (up = front windows and down = rear windows). Then operate the left or right rocker switch to operate the corresponding window.

Protective system

If the window glass encounters resistance above half way during automatic closing, movement is immediately stopped and the window opens slightly.

Interruption of power supply

Automatic opening and closing of the windows may not be possible after an interruption of the power supply (battery / fuse) or low voltage. After the problem has been fixed, reprogram the windows as follows:

1. Close the doors.
2. Switch on the ignition.
3. Close each window and hold the up button for at least a further 3 seconds.

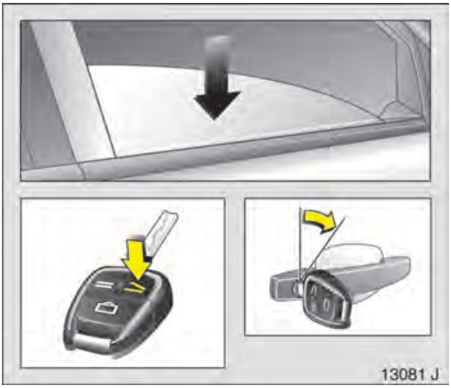
WARNING:

To avoid risk to children (through incorrect use of electric windows), the key should be removed from the ignition when leaving the vehicle.

WINDOWS cont.

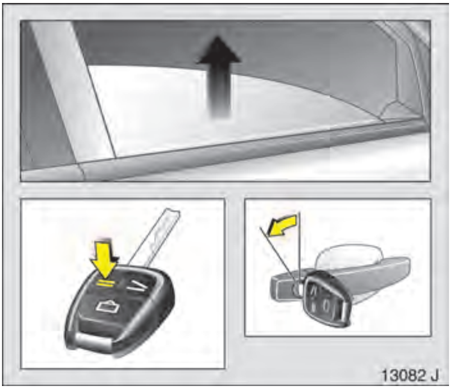
Operating the windows from outside

The windows can be opened or closed from outside of the vehicle by using either the key remote functions, or the key in the driver's door lock.



TO OPEN

- Press the ≥ button on the remote coded key until the windows are open.
- Hold the key in the driver's door lock in the door unlocking position until the windows are open.



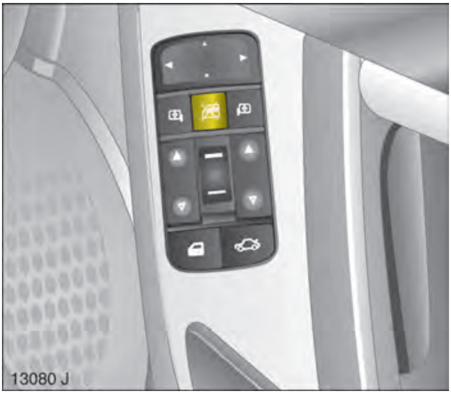
TO CLOSE

- Press the = button on the remote coded key until the windows are closed.
- Hold the key in the driver's door lock in the door locking position until the windows are closed.

Note: These functions also operate the sunroof (if fitted).

OVERLOAD

If the system is overloaded, the power supply is cut-off for a short time before being restored.



SAFETY SWITCH

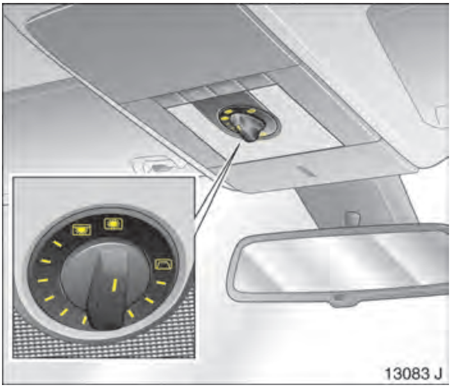
The window switches in the rear doors can be disabled by engaging the safety switch, located in the driver's door control panel.

Press the safety switch. The switch illuminates and the rear switches are disabled.

Press the safety switch again to enable the rear window switches.

SUNROOF (if fitted)

Operation



The sunroof switch is a rotary switch located in the roof console, between the sun visors.

The electric sunroof incorporates a glass panel and a sun shade.

The glass panel can be operated in two ways:

- slid open and closed
- tilted open and closed (raised / lowered).

The sun shade can be opened manually when the glass panel is closed or raised.

The glass panel can be operated:

- when the ignition is on
- within 10 minutes of switching the ignition off
- within 10 minutes of opening or closing the driver's door
- within 10 minutes of inserting or removing the ignition key.

The sunroof cannot be operated when the vehicle is locked.

If the sunroof is to remain open when locking the vehicle, briefly press the rotary switch before turning off the ignition.

TO OPEN

Turn the rotary switch to any position between ▭ and ▣. The sunroof moves to the selected position. When ▣ is selected, the sunroof is fully open.

COMFORT POSITION

Turn the rotary switch to the ▣ position. When ▣ is selected, wind noise is reduced.

TO CLOSE

Turn the rotary switch to ▭.

TO RAISE

Turn the rotary switch to any position between ▭ and ⏢. The sunroof raises to the selected position. When ⏢ is selected, the sunroof is fully raised.

TO LOWER

Turn the rotary switch to ▭.

POSITION MEMORY

If the rotary switch is pressed briefly when the ignition is on, the sunroof automatically returns to its previous position.

OVERLOAD

If the system is overloaded, the power supply is cut-off for a short time before being restored.

SUNROOF (if fitted) cont.

Closing the sunroof from outside

The sunroof can be closed from outside the vehicle by using either the key remote functions, or the key in the driver's door lock.

- Press the ═ button on the remote coded key until the sunroof is closed.
- Hold the key in the driver's door lock in the door locking position until the sunroof is closed.

Protective system

If the sunroof glass encounters resistance during automatic closing, movement is immediately stopped and the sunroof opens. However, if higher closing forces are applied to the sunroof when it is closing (for instance, while driving), this protective feature may not function as expected.

WARNING:

- **To avoid risks due to incorrect use of the electric sunroof, the key should be removed from the ignition when leaving the vehicle.**
- **Be careful when closing the sunroof that hands, heads etc. are clear.**

Interruption of power supply

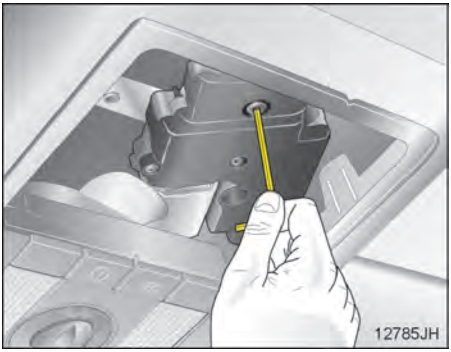
Automatic positioning of the sunroof may not be possible after an interruption of the power supply (battery / fuse) or low voltage. After the problem has been fixed, reprogram the electronics of the sunroof as follows:

1. Switch on the ignition.
2. Press the rotary switch and hold it for in at least three seconds after the sunroof has closed.
3. Turn the rotary switch to ☀ until the sunroof is open.
4. Turn the rotary switch to ▭ until the sunroof is closed.
5. Turn the rotary switch to ▢ until the sunroof is fully raised.
6. Turn the rotary switch to ▭ until the sunroof is lowered and closed.

Fault

If the electric drive fails, the sunroof can be closed manually as follows:

1. Use a screwdriver to disengage and remove the sunroof drive cover.
2. Take the emergency key from the drive cover.
3. Place the emergency key in the drive, as illustrated, and turn it until the sunroof is closed.



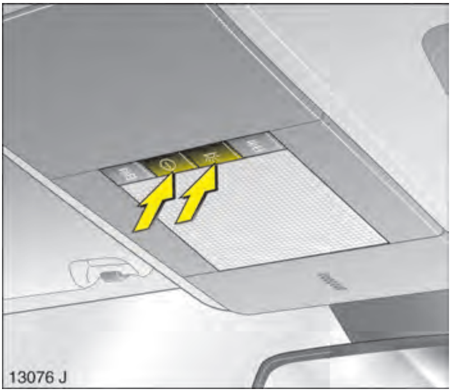
INTERIOR LIGHTS

Front interior light

The interior light comes on when a door is opened. Once the doors are closed, the light turns off after a delay.

To cancel the delay, press the ☼ button.

To turn the interior light on while the doors are closed, push the Ⓘ button.

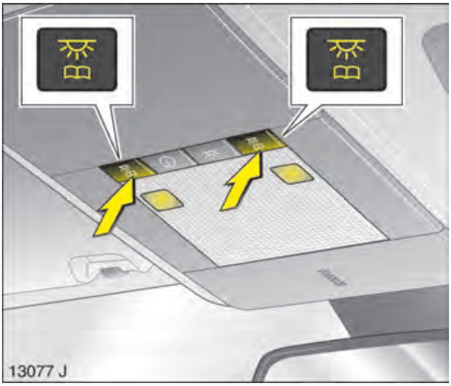


Front reading lights (if fitted)

The front reading lights can be operated independently.

Press the 📖 button to turn a front reading light on.

Press the same 📖 button again to turn the light off.

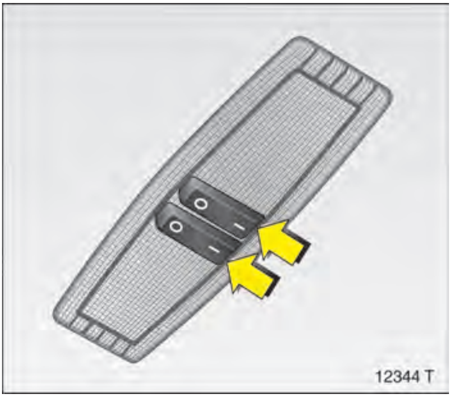


Rear reading lights (if fitted)

The rear light comes on when a rear door is opened and the rear light switch is set to the centre position.

Press the **I** button to turn the light on.

Press the **O** button to turn the light off.



Glovebox light

The glovebox light illuminates when the glovebox lid is opened.

INTERIOR LIGHTS AND PARK BRAKE

Luggage compartment light

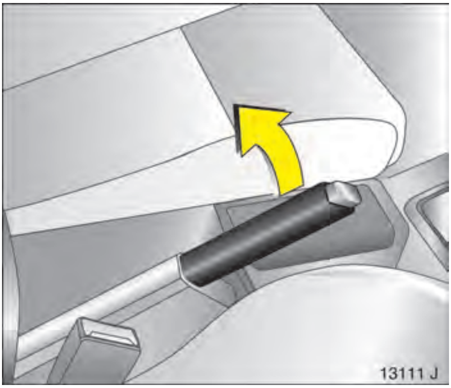
The luggage compartment light illuminates when the boot lid / tailgate is opened.

Sun visor lights (if fitted)

The sun visor lights illuminate when the flap covering the sun visor mirror is opened.

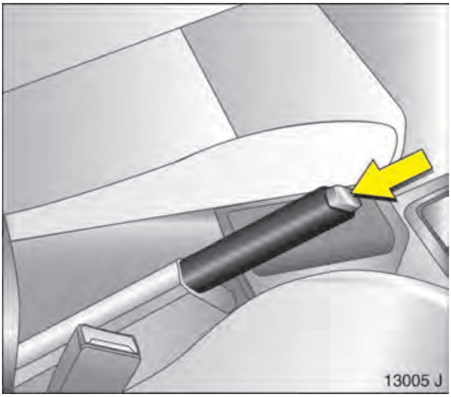
Park brake

To apply the park brake, pull the lever up firmly. On slopes, apply the park brake as firmly as possible.



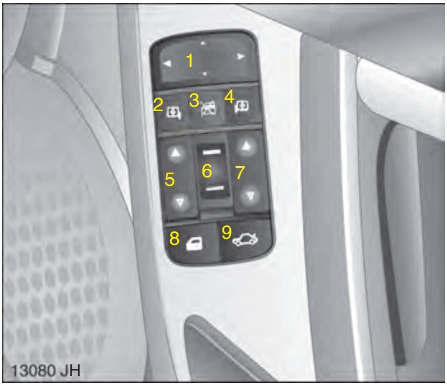
To release the park brake, pull the lever slightly upwards, press the release button in, as illustrated, and fully lower the lever.

Never drive the vehicle with the park brake applied.



DRIVER'S DOOR SWITCHES

Switch panel



The switch panel in the driver's door includes the following switches:

1 Four-way mirror adjustment switch.

Refer to Chapter 3, Mirrors.

2 Left-side mirror selection switch.

Refer to Chapter 3, Mirrors.

3 Rear-window isolation switch.

Refer to Chapter 3, Windows.

4 Right-side mirror selection switch.

Refer to Chapter 3, Mirrors.

5 Left-side window rocker switch.

Refer to Chapter 3, Windows.

6 Front / rear window selection switch. Refer to Chapter 3, Windows.

7 Right-side window rocker switch. Refer to Chapter 3, Windows.

8 All-doors switch. Refer to the following information.

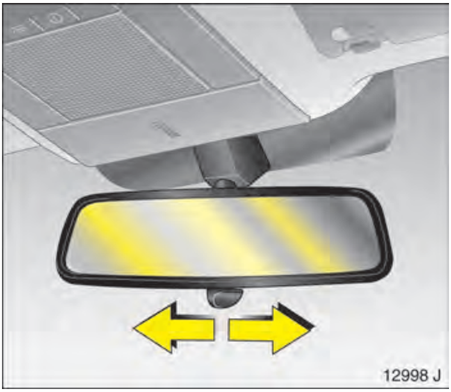
9 Boot lock switch. Refer to Miscellaneous Locks, in this chapter.

MIRRORS

Internal rear view mirror

Grasp the mirror and move it to adjust the rear view.

Swivel the lever on the lower edge of the mirror to reduce the dazzle from following vehicle headlights, at night.



Exterior mirrors

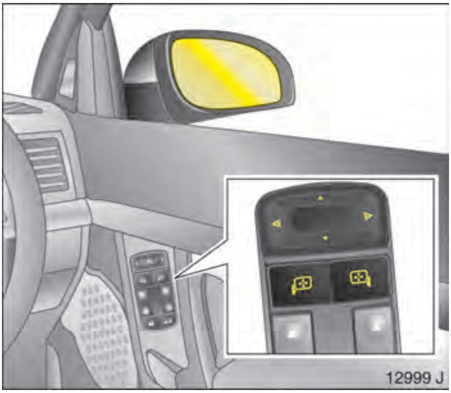
The driver's door control panel incorporates three mirror adjustment switches:

- four-way rocker
- left-side mirror selection
- right-side mirror selection.

Press the left-side or right-side switch to select the mirror to be adjusted.

Move the rocker switch to the left, right, up or down. The mirror tilts in the corresponding direction.

Note: The passenger-side exterior mirror is convex shaped, which makes objects appear further away than they actually are.



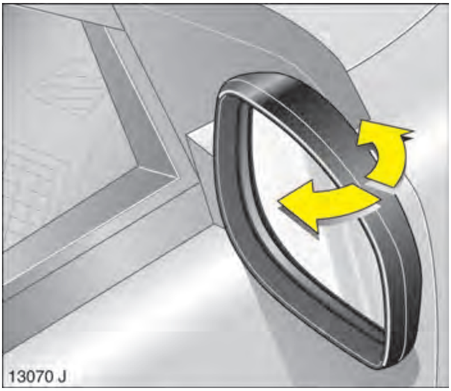
Safety

For the safety of pedestrians, the exterior mirrors swing out of the normal mounting position under impact.

Move the mirrors back into position by applying slight pressure to the housing.

Mirror demisting (if fitted)

Demisting of the exterior mirrors is provided when the rear window demister is switched on. Refer to Chapter 1.

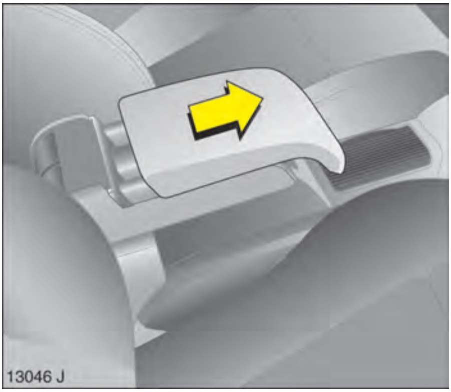


FRONT ARMREST AND ACCESSORY SOCKET (if fitted)

Adjustment

The front armrest is located between the front seats. It can be lowered and adjusted forward or can be pushed back and folded away.

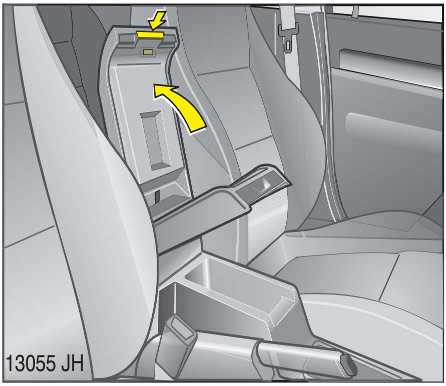
In the lowered position, the armrest can be pushed forward, as illustrated. If the armrest is not required, push it back and fold it up.



The armrest features two storage compartments: one in the lid and one under the lid.

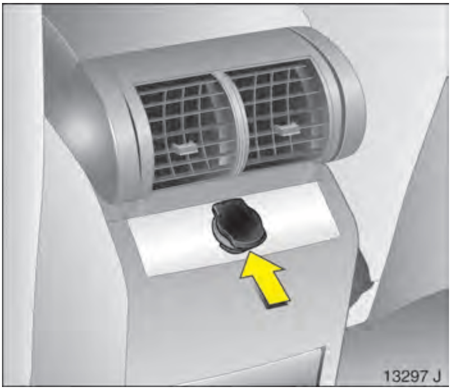
To open the storage compartment in the lid, slide the armrest back, press the button on the front of the lid and lift, as illustrated.

To open the storage compartment under the lid, simply lift the lid.



Accessory socket

The accessory socket is fitted in the rear centre console.



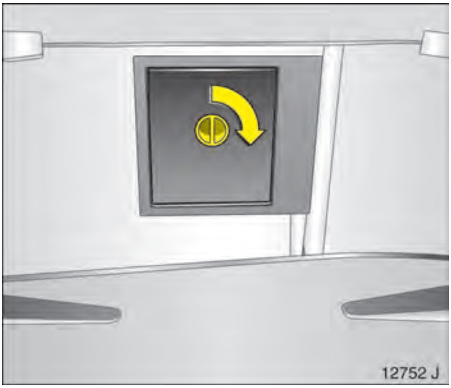
LUGGAGE COMPARTMENT ENLARGEMENT

Transporting long objects

The armrest and the cover behind the armrest can be lowered to enable transporting of long objects. The outer seats can continue to be used for passengers.

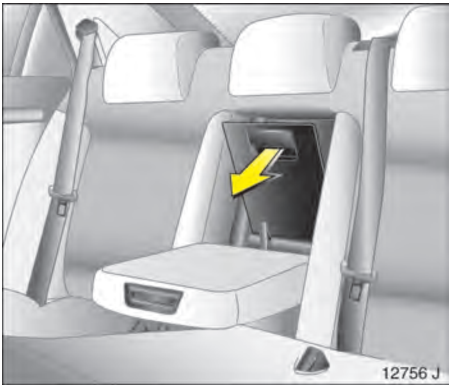
For information on loading your vehicle, refer to Chapter 10.

- Ensure that the arm rest cover is unlocked. (With the handle in the vertical position.)



- Fold the centre armrest onto the seat cushion.
- Pull the armrest cover handle to release the cover and lower the cover as illustrated.

To close the cover, follow this procedure in the reverse order.

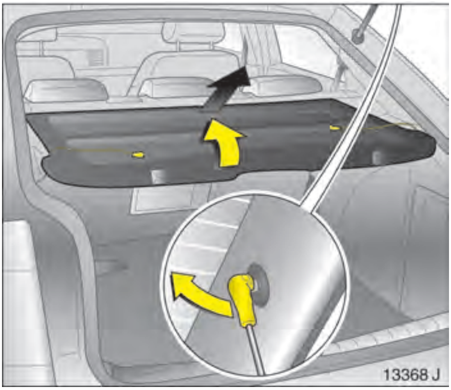


Hatch: transporting tall objects

Remove the rear compartment shelf in the luggage compartment to transport tall objects.

- Open the tailgate.
- Unhook the rear compartment shelf retaining cord, as illustrated.
- Remove the rear compartment shelf from the side guides and lift it out.

To install the rear compartment cover, follow this procedure in the reverse order.



Note: Avoid transporting bulky objects that cause the tailgate to be open or ajar. This can allow exhaust fumes to enter the vehicle.

ELECTRICAL SYSTEM WARNING

WARNING:

Your vehicle is equipped with a highly sophisticated, electronically controlled electrical system called CANBus. This system constantly checks connected components in the vehicle for correct operation.

To carry out its designed functions, CANBus needs to recognise all the electrical equipment in the vehicle, including any aftermarket electrical equipment or accessories (for example, a tow bar harness, LPG kit or an integrated mobile telephone). This requires all of these components to be connected to the electrical system via purpose built interfaces. For Holden approved parts and accessories and some other non-approved parts and accessories, these interfaces are available from your Holden Retailer. Failure to use the correct interfaces may affect CANBus performance or cause damage to your equipment and/or to the vehicle. Such failure may also affect your New Vehicle Warranty to the extent that Holden considers it affects the specifications or quality of your vehicle.

In order to ensure the correct function of CANBus, Holden recommends that Holden approved parts and accessories are fitted by your Holden Retailer. The use of non-approved parts and accessories may affect the correct function of CANBus and an interface for such parts and accessories may not be available from your Holden Retailer. This may also affect your New Vehicle Warranty to the extent that Holden considers that it affects the specifications or quality of your vehicle.

In addition, you may need to visit your Holden Retailer to have CANBus reconfigured with a Tech 2 diagnostic tool to have the system recognise your new equipment. Please contact your Holden Retailer for details.

Provided the combined load of such equipment does not exceed 30 amps, minor equipment can be safely connected via the accessory socket in the rear of the front console and / or the cigarette lighter socket.

Notes

CHAPTER 4

Driving

Page
4-2 Engine starting
    Running-in
4-3 Safety
4-4 Automatic transmission
4-8 Manual transmission
4-10 Driving precautions
4-11 Driving precautions – tyres
4-12 Anti-lock braking system
4-13 Traction Control
4-14 Electronic stability program

ENGINE STARTING

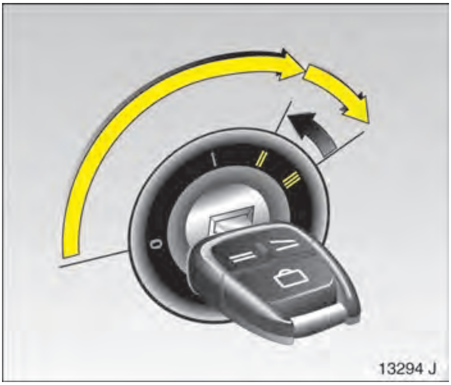
Starting the engine

1. Apply the park brake firmly. Release it only after you have started the engine and are ready to drive off.
2. MANUAL: Press the clutch pedal and move the shift lever to N (neutral). The clutch pedal can now be released.

   AUTOMATIC: Move the shift lever to P (park) or N (neutral) position.

   Note: The ignition must be on and the brake pedal pressed to enable the shift lever to be moved away from P (park).
3. Keep your foot off the accelerator pedal prior to and during starting. Pressing the accelerator pedal increases cranking time. It does not help the engine to start.
4. For both cold and hot starting:

   Turn the key to **III** only until the engine starts, then release the key.



If the engine will not start after 15 seconds of cranking, wait approximately 15 seconds before trying again. This allows the starter motor to cool.

If the engine will not start and the immobiliser light (🔒) in the tachometer display window is illuminated, turn the ignition off for at least 2 seconds and try again.

If the engine still fails to start, consult a Holden Retailer.

Running-in (for the first 1000 km especially)

The future performance and reliability of the engine depends largely on the care and restraint that you exercise during running in.

After starting, do not race the engine; gradually warm it up.

Start off slowly from a standstill.

Drive your vehicle at various speeds. This improves the bedding-in of parts.

Note: Do not use full throttle and do not allow the engine to labour.

Make good use of all of the gears. Press the accelerator pedal only up to 75 percent of full travel, in all gears and drive ranges.

Avoid hard braking during the first 200 km (and after new brake pads have been fitted).

Switching off the engine

If the engine temperature is very high, (for example, after driving in hilly areas) then allow the engine to idle for approximately 2 minutes before switching it off. This helps prevent heat accumulation. When the engine is hot, the cooling fan may remain on for several minutes after the ignition is turned off.

SAFETY

Before entering the vehicle

1. Check that the windows, mirrors and lights are clean.
2. Check that the tyres are not flat.

Before driving off

1. Be sure that all of the doors are secured.
2. Position your seat for comfortable driving.
3. Adjust the rear view mirrors.
4. FASTEN SEAT BELTS.
5. Check that the warning indicators light up when you turn the key to start the engine. Refer to Chapter 1.

   AUTOMATIC: To move the shift lever away from P (park), the brake pedal must be pressed and the ignition switched on.

   MANUAL: When starting off on a very steep hill, it may be helpful to turn traction control off. Refer to Traction Control in this chapter.

Parking

1. Set the shift lever and apply the park brake.

   AUTOMATIC TRANSMISSION

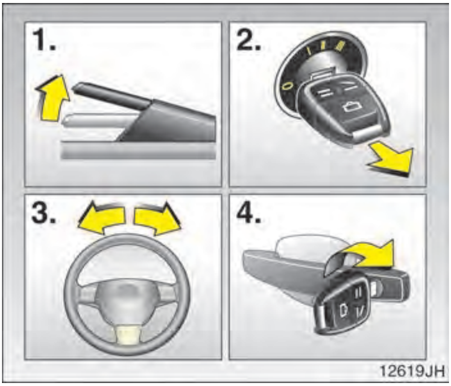
   Move the shift lever to P (park).

   Note: The key can only be removed when the transmission is in P (park).

   MANUAL TRANSMISSION

   Move the shift lever to 1 (first) or R (reverse).
2. Turn off the engine. Turn the ignition key to **O** and remove the key.

   Remember to shut the windows and switch off the exterior lights.
3. Swivel the steering wheel to apply the steering lock.
4. Lock the vehicle when leaving it.

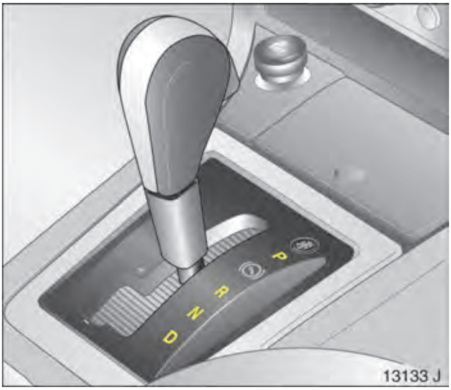


WARNING:

- **Be careful where you park or drive. As with any vehicle, do not park or operate this vehicle in areas where combustible materials such as dry grass or leaves can come in contact with a hot exhaust system.**
- **Never leave the engine running in an enclosed space such as a closed garage or underground car park.**

AUTOMATIC TRANSMISSION

The shift lever is located between the front seats. Lift the release knob below the lever handle to shift it into position.



WARNING:

To move the shift lever out of P (park), the brake pedal must be pressed and the ignition on. To remove the key from the ignition switch, the shift lever must be in P.

The transmission changes gears automatically when in automatic mode; the driver can change gears manually using the manual mode.

Move the shift lever to D (Drive) in the right-hand side position to select automatic mode or to the left-hand side position (in D) to select manual mode.

Shift lever position indicator

The right-hand side of the tachometer display window shows the currently engaged gear or mode.

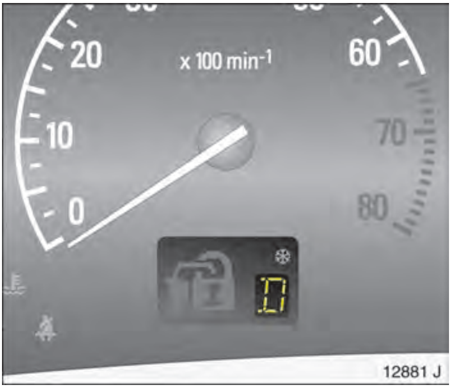
P Park position

R Reverse gear

N Neutral or idling position

D Automatic mode

1–**5** Manual mode, selected gear.



Automatic mode

Automatic mode includes the following positions:

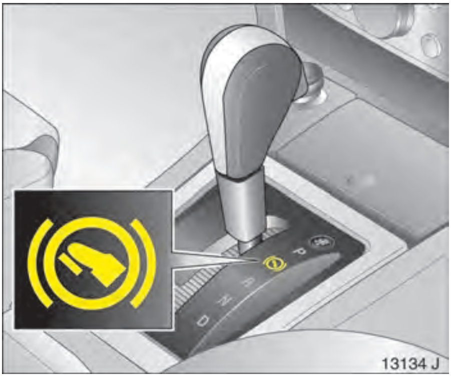
P Park position

R Reverse gear

N Neutral or idling position

D Drive position for normal driving conditions in 1st to 5th gear.

The control indicator ◎ illuminates beside the shift lever when either P or N is selected.



AUTOMATIC TRANSMISSION cont.

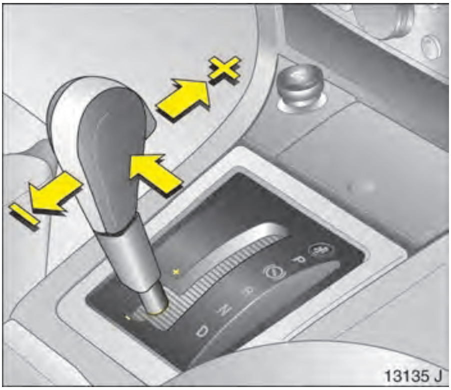
Manual mode

Manual mode enables the driver to change gears, as follows:

- **+** Shift to a higher gear.
- **–** Shift to a lower gear.

If a higher gear is selected when the vehicle speed is too low, or a lower gear when the vehicle speed is too high, the gear will not change. This prevents the engine from running at too low or too high r.p.m.

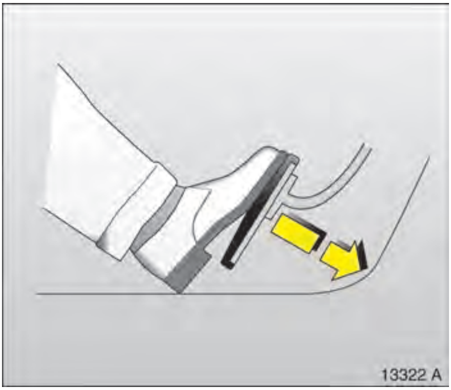
If the engine speed is too low but a lower gear has not been selected, the transmission will automatically shift to a lower gear. However, if the engine speed is too high, the transmission will not automatically shift to a higher gear.



Kickdown

To activate the kickdown function, press the accelerator pedal past its resistance point. Depending on the engine speed, transmission shifts to a lower gear, which enables maximum acceleration.

This function is operational in both automatic and manual modes.



Winter program

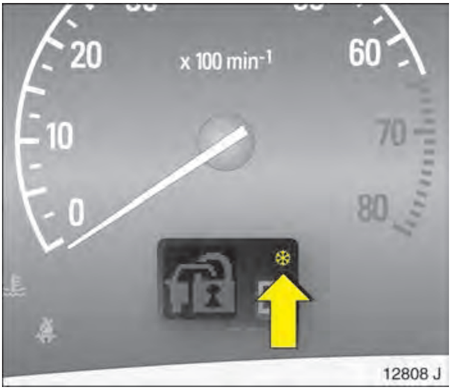
Use the winter program when driving on slippery or muddy roads. This holds the transmission in fourth gear, which provides better traction and safer vehicle operation.

To activate the winter program, ensure that the shift lever is in D and press the ❄ button, located on the right-hand side of the transmission shift lever. The ❄ indicator illuminates in the tachometer window when this program is active.

To deactivate the winter program:

- press the ❄ button again,
- turn the ignition off, or
- move the shift lever to manual mode.

The winter program automatically deactivates at very high transmission oil temperatures.



AUTOMATIC TRANSMISSION cont.

Engine braking

The automatic transmission selects the driving program for optimum engine braking.

If required, lower gears can be manually selected to increase the engine braking effect.

Note: First gear has the greatest engine braking effect.

Rocking the vehicle

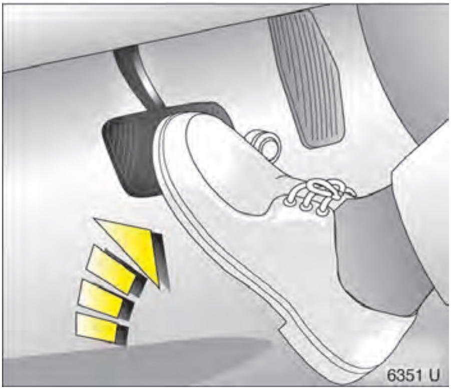
To free the vehicle if it is stuck in sand, mud or snow it may become necessary to 'rock' the vehicle. To rock the vehicle, move the shift lever from D (Drive) to R (Reverse) repeatedly while applying light pressure to the accelerator pedal. Do not race the engine and avoid sudden acceleration.

Note: This applies only to the exceptional circumstances mentioned above.

Manoeuvring the vehicle

To manoeuvre the vehicle back and forth (when parking, for instance), use the automatic vehicle movement that occurs when the brake pedal is released.

Note: Do not press the accelerator and brake pedals simultaneously.



Stopping the vehicle

- The shift lever can be left in the chosen gear with the engine running.
- When stopping on gradients, apply the park brake or press the brake pedal.
- To prevent overheating of the transmission, do not increase the engine r.p.m. to while the vehicle is stationary and a gear has been selected.
- Switch off the engine if stopping for a lengthy period, for example in traffic jams or at level crossings.
- Before leaving the vehicle, apply the park brake, place the shift lever in P (Park) and remove the ignition key. (The ignition key can be removed only when the shift lever is in P.)
- If the shift lever is not in P when the ignition is switched off, the (◎) control indicator flashes.
- If the ignition key is not removed, the battery may discharge if the vehicle is left for a lengthy period of time.

AUTOMATIC TRANSMISSION cont.

Neutral idle control

This feature is designed to reduce fuel consumption. The automatic neutral shift function is activated when:

- the shift lever is in D or manual mode
- the foot brake is engaged
- the vehicle is stationary
- the accelerator pedal is not pressed, and
- the transmission oil temperature is greater than 0°C.

Once the brake is released and the accelerator pedal is engaged, the automatic neutral shift function is deactivated and the vehicle moves off in the usual manner.

Cold start operation

When the engine is started cold, the operating temperature program delays the gear shifting allowing higher engine speeds. This quickly brings the catalytic converter to the optimum temperature for pollutant reduction.

Adaptive shift programs

These programs automatically adapt the timing of gear shifting to suit driving style. For example:

- Sporty driving style: gear shifting occurs at higher engine speeds.
- Economical driving style: gear shifting occurs at lower engine speeds.
- Special driving conditions such as driving up and down hills, towing a caravan or trailer, driving with a heavy load: gear shifting occurs based on the specific situation.

Fault mode

In the event of a fault, the control indicator ⚙ illuminates. The transmission no longer shifts automatically. However, driving can be continued in manual mode with the available selection of second gear and fifth gear. In automatic mode, the following positions can be selected:

D 5th gear
N Neutral
R Reverse
P Park.

Have the system checked at a Holden Retailer as soon as possible after a fault is indicated.

Interruption of power supply

If the vehicle battery is flat, the electric park lock prevents the shift lever from being moved away from the P position. To unlock the shift lever, refer to Chapter 6.

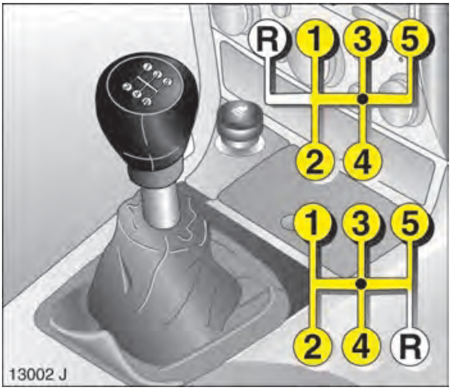
MANUAL TRANSMISSION

The manual transmission has five forward gears and a reverse gear.

The shift pattern applying to your vehicle is illustrated on the top of the shift lever.

When selecting fifth gear, push the lever towards the right (against slight spring pressure) throughout the shift operation.

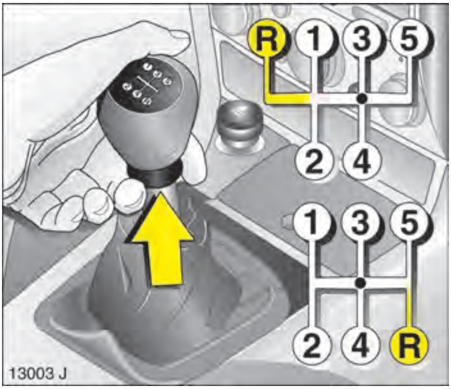
When shifting from fifth to fourth gear, do not exert any pressure towards the left.



Ensure the vehicle is stationary before selecting reverse gear.

To select reverse gear, lift the ring beneath the knob on the shift lever and move the lever into the reverse position.

If the gear does not engage easily, then release and then press the clutch pedal or select a different gear before trying again.



MANUAL TRANSMISSION cont.

Shift speeds

The recommended speeds at which gear changes should be made, under normal driving conditions, is shown on this chart.

Using the Economy shift speeds helps maximise fuel economy.

Upshifting at higher road speeds may be necessary based on varying driving conditions (such as vehicle load, the road gradient or during overtaking) and when other than light acceleration is required.

Manual transmission shift speeds (km/h)

Gear change	2.2 litre engine		3.2 litre engine	
	Normal	Economy	Normal	Economy
1st-2nd	22	20	22	18
2nd-3rd	40	32	42	30
3rd-4th	60	45	58	42
4th-5th	78	58	72	55

Operating notes

- When shifting from one gear to another, be sure to press the clutch pedal fully to avoid clashing and possible chipping of the transmission gears.
- Never attempt to engage reverse gear until the vehicle has completely stopped. A slight pause (a few seconds) between pressing the clutch pedal and moving into reverse gear is desirable to allow the rotating components to stop. Whenever reverse gear is selected with the ignition on, the reverse lights illuminate.
- Move the shift lever using moderate effort, allowing time for the transmission synchronisers to work properly.
- Do not drive with your foot resting on the clutch pedal. This causes substantial clutch wear.
- When stopped on an incline, do not hold the vehicle by slipping the clutch. Use the park brake or brake pedal.
- To maintain safe speeds on a steep downgrade and to reduce brake wear and overheating, shift to a lower gear before starting the descent.
- Do not overspeed the engine when shifting down to the next lowest gear.
- When starting off on a very steep hill, it may be helpful to turn traction control off. Refer to Traction Control in this chapter.

DRIVING PRECAUTIONS

Brakes

- Power assisted brakes, which are fitted to your vehicle, use vacuum from the engine when it is running. Do not let the vehicle run downhill without the engine running.
- Driving through water may affect the performance of the brakes. Applying the brakes lightly will indicate whether they have been affected. To dry the brakes quickly, lightly apply the brakes while maintaining a slow forward speed with an assured clear distance ahead, until brake performance returns to normal.
- Brake pedal travel should not be obstructed by ill-fitting floor mats or any other material which causes interference with normal pedal movement.
- Your seat should be positioned so that you can correctly push the brake pedal.

Power steering

If the power steering is rendered ineffective because the engine has stalled, the drive belt has broken or the pump fluid reservoir is empty, the vehicle can still be steered.

However, due to the much greater effort required to steer, it is recommended that you have the problem fixed promptly.

Loose articles

Do not leave loose articles or luggage in the passenger compartment. Whenever possible, loads stowed in the luggage compartment should be firmly secured.

WARNING:

Gas cylinders can leak, creating a risk of fire or explosion. As a precaution, ensure adequate ventilation when carrying gas cylinders. They must be restrained from rolling around, and where possible, placed in the load area of the vehicle. It is recommended that if gas cylinders are frequently transported that a purpose-built carrying compartment be used. Transportation of gas cylinders is regulated by legislation in some states.

Loading the vehicle

Loading the vehicle changes the mass distribution and therefore the handling of the vehicle when driving. After loading the vehicle, extra care should be taken to become familiar with the handling and feel of the vehicle. Refer to Chapter 10.

Battery care whilst driving

When driving slowly or when the vehicle is stationary (for example, in slow traffic, stop-and-go traffic or traffic jams), turn off all unnecessary electrical loads where possible (heated rear window, auxiliary headlights etc).

When starting the engine, press the clutch pedal so that transmission resistance is eliminated and the starter motor and battery require less power.

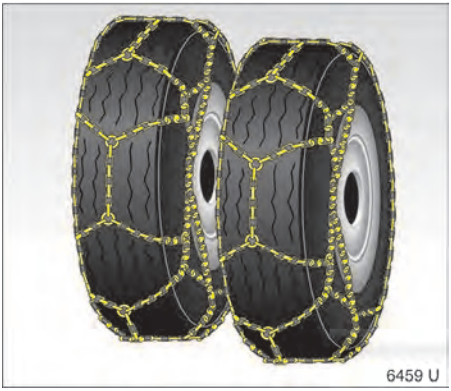
Driving in mountainous terrain or with a trailer / caravan

The cooling fan is driven electrically and so its cooling capacity is not dependent on the engine speed. At high engine speeds, a lot of heat is produced and at low engine speeds, less heat is produced. When driving uphill, therefore, do not shift down into a lower gear when the vehicle can still climb the hill in the higher gear.

DRIVING PRECAUTIONS – TYRES

Snow chains (215/55 R16 tyres)

- Vectras are front wheel drive vehicles and as such, snow chains are only fitted on the front (driving) wheels.
- Only fine-linked chains, not protruding more than 15 mm on the tyre tread and inside of the tyre (including the chain lock) should be used.
- Depending on design, large hub caps may come into contact with parts of the chains. In such cases, remove the hub caps.



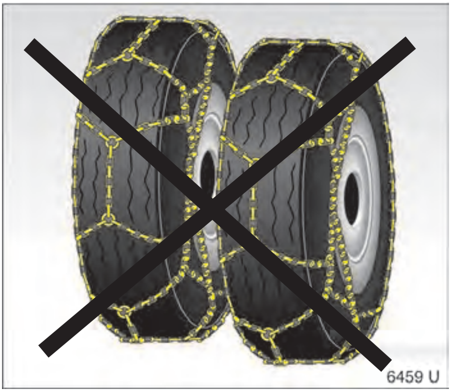
WARNING:

Tyre chains can only be used at speeds up to 50 km/h and when travelling on roads that are free of snow they should only be used for brief periods, since they are subject to rapid wear on hard roads and may snap.

Snow chains (215/50 R17 tyres)

Some Vectra models have 215/50 R17 tyres fitted as standard.

Due to lack of clearance, snow chains are not to be fitted to these.



Tyre traction

A decrease in tyre grip occurs when water, snow, ice, gravel or other materials are on the road. Driving practices and vehicle speed should be adjusted according to the road conditions.

When driving on wet or slushy roads, it is possible for a wedge of water to build up between the tyre and road surface. This phenomenon, known as hydroplaning, may cause partial or complete loss of grip, which affects steering and braking. To reduce the possibility of hydroplaning:

- reduce speeds during rainstorms,
- replace tyres when tread wear indicators are visible,
- regularly check that tyres are properly inflated.

ANTI-LOCK BRAKE SYSTEM

Monitoring

The Anti-lock Brake System (ABS) continuously monitors the vehicle’s brake system and prevents the wheels from locking, irrespective of the road conditions and tyre grip. It starts to regulate the braking pressure as soon as a wheel shows a tendency to lock. The vehicle remains steerable, even in the event of panic braking, for instance when swerving to avoid an obstacle or on bends.

Note: Do not let this special safety feature tempt you into taking risks when driving. Traffic safety can only be achieved by adopting a responsible driving style.

The braking effect is regulated by the ABS every millisecond during braking.

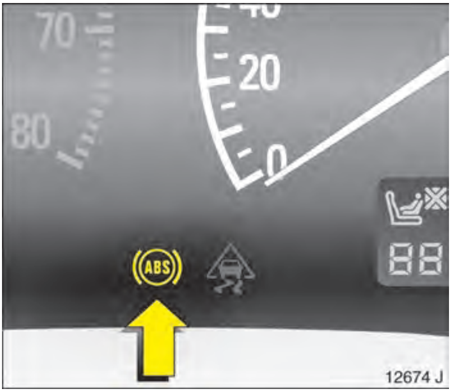
Operation

When active, ABS operation is noticeable through pulsing of the brake pedal and the noise of the regulation process. To achieve optimum braking, keep the brake pedal pressed fully throughout the braking process. Use this as a reminder to match your speed to the road conditions, even though ABS is keeping control of the braking.

In an emergency braking situation, the driver should keep full force on the brake pedal without pumping it. Pumping the brake pedal can reduce brake efficiency when ABS is controlling the braking.

When the ignition is switched on, the ABS light in the instrument panel illuminates for several seconds while the system performs a self-check. The self-check may be audible.

If the ABS light does not go out or if it comes on during driving, there is a defect in the ABS. The vehicle’s brake system remains operational but without ABS assistance. Have your Holden Retailer check the system as soon as possible.



TRACTION CONTROL

Operation

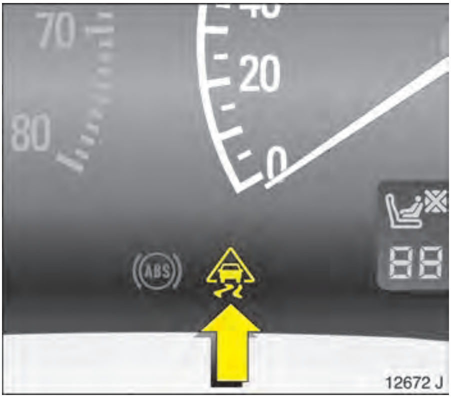
Traction control helps prevent the driving wheels from spinning, irrespective of the road conditions and tyre grip. As soon as at least one driving wheel starts to spin, traction control reduces engine output and applies the brakes to the spinning wheel, as necessary. This can improve the vehicle steering control and driving power, particularly on snow and ice, as well as on wet or slippery roads.

Traction control helps you to keep control of the vehicle and reminds you to match your speed to the road conditions.

Note: Do not let this special safety feature tempt you into taking risks when driving. Traffic safety can only be achieved by adopting a responsible driving style.

The ⚠ light on the instrument panel illuminates for a few seconds when the ignition is switched on. If ⚠ does not illuminate or if it illuminates during driving, a fault is indicated in the system and traction control will not be operational. Have your Holden Retailer check the system.

The ⚠ light on the instrument panel flashes when the traction control system is operating, indicating that the vehicle is in a critical situation. When this occurs, engine output may be reduced (the sound of the engine may change) and the vehicle may be braked automatically to a small degree.



ELECTRONIC STABILITY PROGRAM (if fitted)

When required, the Electronic Stability Program (ESP) improves driving stability in any driving situation, regardless of the road surface or tyre grip.

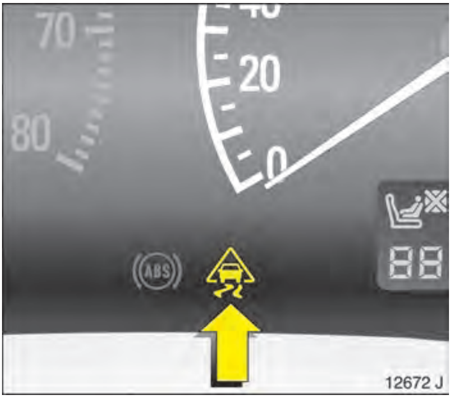
Note: ESP operates in conjunction with the Traction Control (TC) system. Refer to Traction Control in this chapter.

ESP monitors the vehicle movements. As soon as the vehicle starts to swerve (understeer / oversteer), engine output is reduced (the sound of the engine changes) and individual wheels are specifically braked. This helps improve the vehicle driving stability on snow and ice and on wet or slippery road surfaces. ESP helps you to keep control of the vehicle and reminds you to match your speed to the road conditions.

Note: Do not let this special safety feature tempt you into taking risks when driving. Traffic safety can only be achieved by adopting a responsible driving style.

The ⚠ light on the instrument panel illuminates for a few seconds when the ignition is switched on. If ⚠ does not illuminate or if it illuminates during driving, a fault is indicated in the system and ESP and / or TC may not be operational. Have your Holden Retailer check the system.

The ⚠ light in the instrument panel flashes when ESP or TC is operating, indicating that the vehicle is in a critical situation. When this occurs, engine output may be reduced and the vehicle may be braked automatically to a small degree.



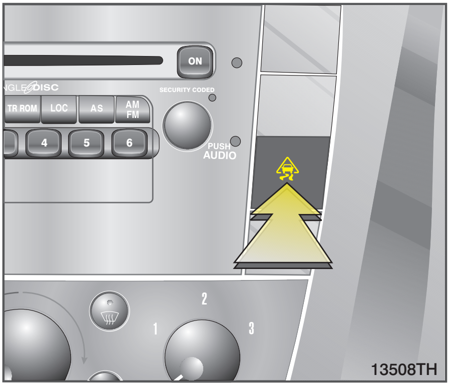
Switch off ESP and TC

ESP and TC are automatically switched on when the ignition is switched on. This system is operational when the ⚠ light in the instrument panel remains off.

To manually switch off ESP and TC, press the ⚠ button, located to the right of the radio panel. The ⚠ light in the instrument panel illuminates.

Press the ⚠ button again to switch on ESP and TC.

Note: ESP and TC can be switched off only when the vehicle speed is less than 60 km/h.



CHAPTER 5

Fuel

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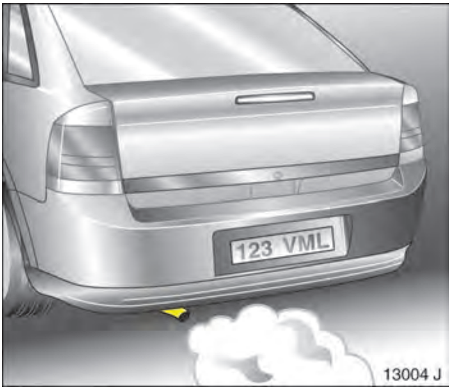
5-2 Fuel
5-4 Petrol
5-5 Emission control
5-6 Reducing fuel consumption

FUEL



EXHAUST WARNING – CARBON MONOXIDE POISONING

- **Exhaust gases can produce carbon monoxide; a dangerous gas, which can cause unconsciousness and even death to both humans and animals.**
- **You could inhale the gases if the exhaust system on your vehicle is faulty.**
- **To protect against exhaust gases entering the vehicle, the exhaust system and the body should be inspected:**
  - **each time the vehicle is serviced,**
  - **whenever a change is noticed in the sound of the exhaust system,**
  - **whenever the exhaust system, underbody or rear of the vehicle is damaged.**
- **Take the vehicle to your Holden Retailer if you think your vehicle needs inspecting.**
- **Do not sit (or leave children or pets) in a parked vehicle for any extended period of time with the engine running.**
- **Do not run the engine in an enclosed area (such as the garage) any longer than is needed to move the vehicle.**
- **Driving with the tailgate / boot open is not recommended. If you must travel with tailgate / boot open, close all of the windows, ensure that the heater controls are set to outside air (rather than recirculated) with air directed to the face and the fan on the highest speed. Do not exceed 50 km/h.**

When the vehicle is driven for the first time, wax and oil on the exhaust system may evaporate, producing smoke-like emissions which should not be inhaled. Allow the wax and oil to evaporate while the vehicle is in the open air.

FUEL cont.

LPG conversion

These vehicles have not been designed by Holden to be converted to LPG and Holden does not provide LPG conversion kits for these vehicles. Please refer to the warranty section in Chapter 9. Your warranty may be invalidated to the extent that any LPG alterations affect the specifications of your vehicle.

WARNING – USE OF FUEL CONTAINING ETHANOL

When purchasing such fuel, we recommend that your vehicle be operated on fuel containing no more than 10% ethanol. Purchasing your fuel from a reputable fuel retailer may reduce the risk of purchasing fuel with more than 10% ethanol or fuel which contains abnormal fuel properties.

Under no circumstances should you use fuel containing more than 10% ethanol. Use of such fuels may result in engine malfunction, starting and operating difficulties, and materials degradation. These adverse effects could result in permanent damage to your vehicle and personal injury. It is also important to note that when ethanol blends are used, fuel consumption can be expected to increase due to the lower energy content of ethanol.

The use of fuel containing more than 10% ethanol may also affect your New Vehicle Warranty to the extent that Holden considers that the fuel affects the specifications and quality of your vehicle.

PETROL

WARNING:

- **Petrol should be regarded as extremely flammable and highly explosive.**
- **Always turn off the engine and any mobile phones when refuelling.**
- **Do not smoke or allow open flames or sparks near the vehicle when refuelling.**
- **If petrol fumes are smelt while driving, the cause should be found and corrected without delay by a Holden Retailer.**

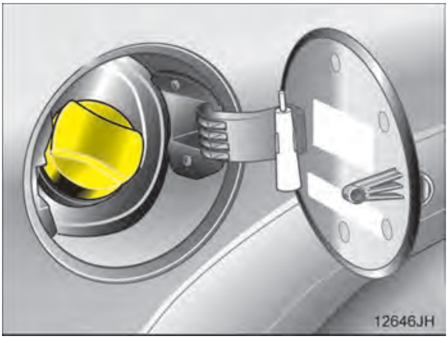
The petrol filler is located on the driver's side of the vehicle.

The fuel filler flap is unlocked when **all** doors are unlocked and locked when the doors are locked.

Remove the filler cap by turning it anticlockwise, and hook the cap onto the filler flap.

After refilling, securely tighten the cap clockwise and close the flap.

Refer to Chapter 8 for the capacity of the fuel tank.



Petrol requirements R.O.N. (Research Octane Number)

2.2 LITRE ENGINE

Use unleaded petrol of at least 91 RON.

3.2 LITRE ENGINE

Use unleaded petrol of at least 95 RON (premium, high octane). If premium unleaded petrol is not available, normal unleaded (91 RON) can be used provided that heavy engine loads are avoided, such as driving at high speed, towing in hilly areas or loading up the vehicle excessively.

Note: Slight reduction in engine output and torque may occur if 91 RON petrol is used.

Petrol overflow

Over filling of the petrol tank can affect the evaporative emission control system and can also result in a smell of petrol inside the vehicle. Do not add petrol after the petrol filler first clicks off (or petrol blows back) as this allows room for the petrol to expand inside the tank.

Immediately wipe off any overflowing petrol from the vehicle, close the fuel opening and spray or splash with water.

EMISSION CONTROL

Your vehicle is fitted with emission control systems designed to reduce the amount of hydrocarbons (HC), carbon monoxide (CO), and oxides of nitrogen (NOx) that are emitted from the engine and fuel system into the atmosphere. When hydrocarbons and oxides of nitrogen are exposed to sunlight under certain conditions, they contribute to photochemical smog. In addition, carbon monoxide is toxic when highly concentrated.

Owner responsibility

Vehicles sold and serviced within Australia have been designed to comply with Australian Design Rules and State Regulation emission requirements.

The engine, engine control system or exhaust system of your vehicle must not be modified in any way. Any change to the manufacturer's design may increase the emissions or otherwise defeat the intent of the regulations.

WARNING:

Any person who removes, modifies or hinders any part of the emission control system fitted to a vehicle will be contravening Australian Design Rules, refer to A.D.R. 28/01 (External Noise for Motor Vehicles) and A.D.R. 79/01 (Emission Control for Light Vehicles). It is also illegal to drive a vehicle modified in this way.

Maintenance requirements

To ensure continuing compliance with the regulations you must maintain your vehicle's emission control system as per the service manual for your vehicle, at the frequency shown in the Holden Maintenance Schedule in Chapter 12.

It is recommended that the necessary servicing be performed by an authorised Holden Retailer who has the specialised servicing equipment and trained personnel available to ensure that the adjustments and services specified are carried out.

Petrol filler nozzle restrictor

Your vehicle has been designed to operate on unleaded petrol.

A petrol nozzle restrictor is fitted to ensure that only unleaded petrol is used; this allows the thinner, unleaded petrol nozzle to enter the fuel filler neck and open the hinged flap (so that petrol can be added to the tank). The leaded petrol nozzle is wider and cannot fit into the filler neck to open the flap.

WARNING:

The use of any fuel, other than the fuel specified, may cause serious damage to your vehicle and may void your warranty. Only clean fuel of good quality should be used.

REDUCING FUEL CONSUMPTION

Engine

Maintain the engine in peak mechanical condition by having it serviced regularly in accordance with the Maintenance Schedule in Chapter 12. This will ensure that items (such as the spark plugs and air cleaner etc.) are maintained for minimum fuel usage and peak engine performance.

Tyre pressure

Maintain the recommended tyre pressures. Inadequate tyre pressure costs money in two ways: higher fuel consumption and increased tyre wear. Refer to Chapter 7, Weekly checks.

Wheel alignment

Maintain correct front wheel alignment. Incorrect alignment causes drag, which increases fuel consumption.

Warm ups and idling

Avoid long engine warm ups. They are unnecessary and waste fuel. An engine reaches its efficient operating temperature most effectively when driving.

You should also avoid long engine idling. If you have to wait for more than a couple of minutes, it is worthwhile to switch off the engine and conserve fuel. Three minutes of idling corresponds to approximately 1 km of driving.

Accelerating, driving and braking

Accelerate gently, avoiding rapid starts. Sudden bursts of speed, full throttle acceleration and hard braking are certain fuel wasters. Drive the vehicle at steady speeds where possible (after run-in). It is desirable to reach top gear as soon as possible, but under no circumstances should you force the engine to labour in top gear.

Riding the brake

'Riding the brake' (resting your foot on the brake pedal when you do not intend to brake) can cause overheated brakes. This can wear out the brake pads faster, damage the brakes and waste fuel.

Air conditioning

When not required, turn off the air conditioning to reduce fuel consumption.

Roof racks

Roof racks can increase fuel consumption by 1 litre per 100 km or more, due to increased air resistance. They should, therefore, be removed when not in use.

Loading

Unnecessary weight increases fuel consumption, especially when accelerating. In city traffic, a load of 100 kg can increase fuel consumption by 0.5 litre per 100 km.

CHAPTER 6

Emergencies

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    Being involved
    Being a witness
    Medical assistance
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Your new vehicle is covered for 3 years by 24 hour Roadside Assistance. Refer to Chapter 9.

ACCIDENTS

All motorists are advised to learn what to do at the scene of an accident, particularly where persons are injured. Injured people can choke to death if their air passages are not cleared. They can bleed to death unless the bleeding is stopped. They may require mouth-to-mouth resuscitation or may have to be moved, even though badly injured. It is important that you understand how to avoid further damaging an injured neck or back or other broken limbs. In all cases, ensure safety for the rescuers, victims and bystanders. The following notes may help.

Part 1. Accident – being involved

If you are involved in an accident you are advised to do as follows:

- Stop immediately and remember to turn off the engine and apply the park brake.
- Remember that time is vital. Remain calm and alert. Think quickly and clearly.
- Give all possible assistance to all injured persons (see Part 3. Medical assistance).
- Send for police and ambulance if anyone has been injured. Give information as accurately as possible. Give the exact location, the number of injured people and a brief report on the overall situation.
- Warn all other traffic approaching the scene. Turn off all ignition switches. Stop any smoking and mobile phone use near spilt petrol. In darkness, try and light up the area to warn others – use hazard lights, a torch, headlights etc. Do not use flammable items.
- Clear the road of accident debris.
- Exchange your name, address, vehicle registration number and the vehicle owner's name and address with the other parties involved in the accident.
- If damage to property only has occurred, report the facts to the owner of the damaged property, to his or her representative, to any police present at the scene or to the nearest Police Station.
- Try to note all important facts because such details may be important if needed later.

Part 2. Accident – being a witness

If you witness a road accident or it becomes your task to stop and help at the scene of an accident:

- Keep in mind that an observant witness can prove most helpful. Some day you yourself might be very glad of help from a witness.
- DO NOT stop at the scene of an accident just to be a spectator.
- Where other people are already in attendance and giving assistance, you should stop only if you can contribute assistance.
- Give what assistance you can to any injured persons (see Part 3. Medical assistance).

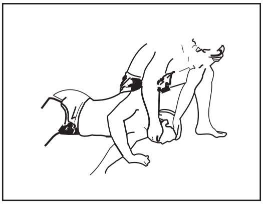
ACCIDENTS

Part 3. Medical assistance

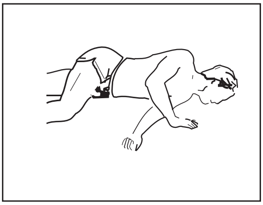
This information is basic first aid information which is intended as a guide only and may not be applicable in all situations. You should always defer to a trained medical officer or other person with first aid knowledge. Protective equipment, such as rubber gloves are recommended.

Keep calm and think clearly. Your experience may not be much but do your best.

- Look after the unconscious person first. Check airway, breathing and circulation. If no breathing, then check if air passages are clear, i.e. nose and mouth. Use your fingers to clear air passages if necessary. If the air way is clear then mouth-to-mouth resuscitation may be needed at once.
- You must be very careful when moving an injured person. It is best not to move at all, except if in danger, as serious and permanent damage can be done to an injured neck or back if not supported during movement. AVOID BENDING OR TWISTING A NECK OR BACK. KEEP THEM STRAIGHT. All injured limbs require support when an injured person has to be moved.
- Unconscious people can choke. To help avoid this:
  - carefully turn the person to one side
  - tilt their head back slightly
  - wipe out the mouth with your finger to remove blood, vomit, broken teeth or dentures.



- Provided it is not dangerous to do so due to injuries, an unconscious person will do best in the following position:
  - lay the person on one side
  - bend the uppermost knee until the thigh is at a right angle to the body
  - bend the uppermost shoulder and elbow so that the hand lies near the face
  - gently pull the underneath arm so that it rests straight on the ground free of any body weight.



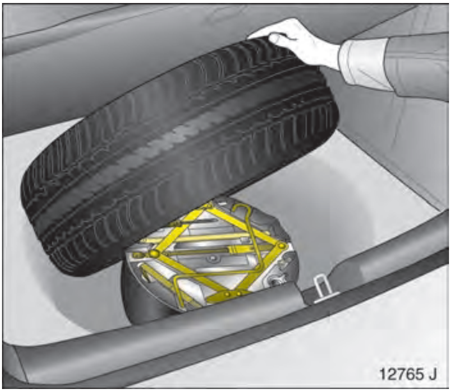
- Try to stop bleeding by applying direct pressure, using your hand, or by pressing torn flesh together. Use any clean cloth available. Fold cloths to make pads. If necessary press one pad on top of another. Keep pressure around edges of a wound BUT NEVER USE A TOURNIQUET.
- Shock may be treated by reassurance, relieving pain, controlling any bleeding and keeping the injured person warm but not hot. It is best not to give any fluids and NEVER ALCOHOL.
- If the injured person is in danger and has to be moved, try and have three or four people help and concentrate on not bending or twisting the neck, spine and injured limbs. Keeping the neck and spine straight is most important.

FLAT TYRE

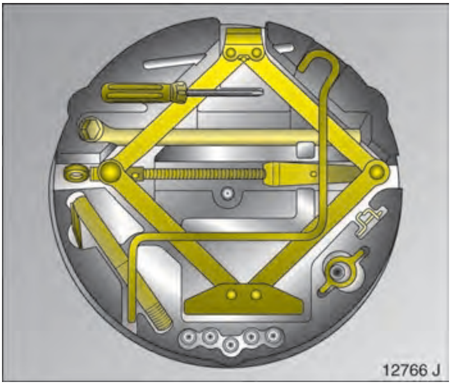
WARNING:

- **Use the jack only for lifting the vehicle when changing wheels.**
- **Never get beneath the vehicle when it is supported only by the jack.**
- **Do not start or run the engine while the vehicle is supported only by the jack.**
- **All passengers should be out of the vehicle when it is being jacked.**
- **Use the jack only at the designated lifting points. Use in other locations could damage the vehicle.**
- **The vehicle should only be jacked on hard, level surfaces.**

1. Park on a level surface (ensuring that the wheels are pointing straight ahead) and firmly set the park brake.
2. Remove the ignition key and for manual transmission, select reverse or first gear, or for automatic transmission, select P (park).
3. Lift up the floor cover and remove the spare wheel.

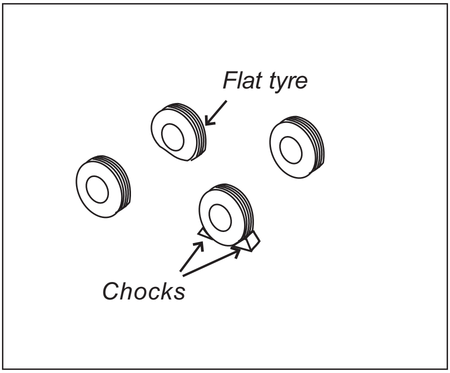


4. The jack, and tools are stowed beneath the spare wheel. Remove the jack, and tools.

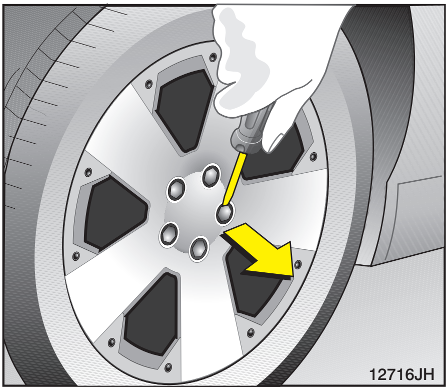


FLAT TYRE cont.

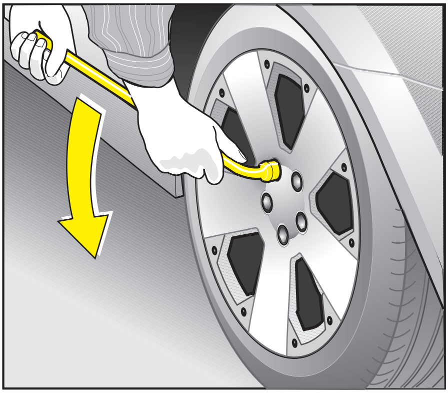
5. Chock the wheel that is diagonally opposite to the flat tyre, by placing wedge blocks, any available blocks of wood or rocks behind and in front of it.



6. Use a screwdriver to lever the wheel bolt caps off.



7. With the wheel bolt wrench, loosen but do not remove, the wheel bolts (turning them anticlockwise).

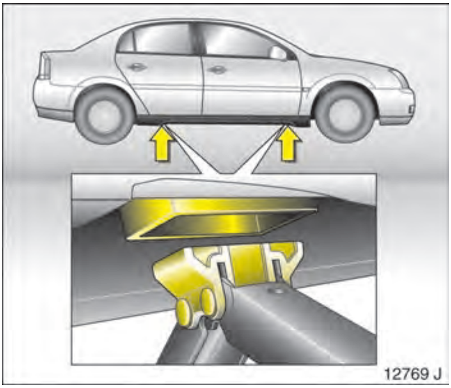


FLAT TYRE cont.

8. Plastic recesses at the front and rear of the vehicle underbody indicate the points to place the jack.

WARNING:

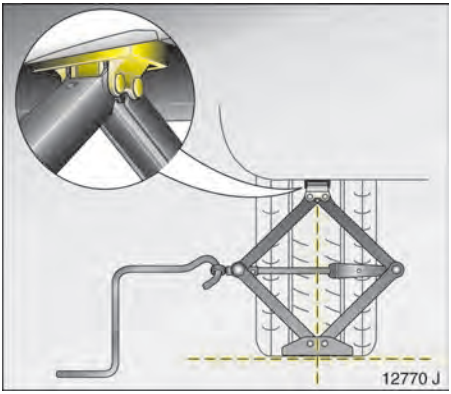
Failure to position the jack as described above could result in serious personal injury or vehicle damage caused by the vehicle slipping off the jack.



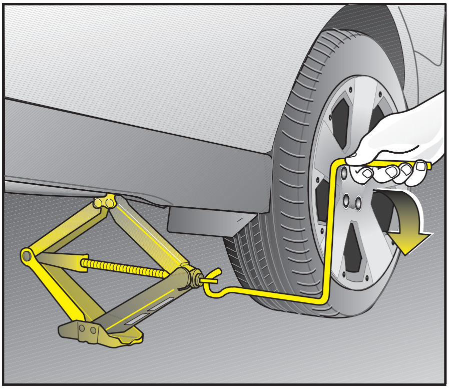
9. Position the jack in the recess nearest to the flat tyre.

   Ensure that:

   - the plastic recess surrounds the jack claw
   - the jack base is touching the ground directly below the claw of the jack.

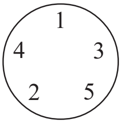


10. Attach the crank to the eye of the threaded rod and turn the crank handle clockwise to raise the vehicle. Continue until the tyre is clear of the ground.

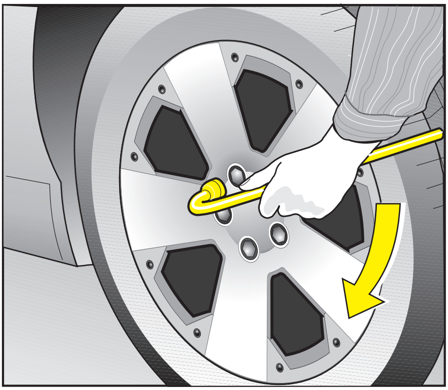


FLAT TYRE cont.

11. Remove the wheel bolts and place them together in a clean, dry spot. Avoid getting dirt in the threads.
12. Remove the wheel from the vehicle. Clean any dirt and grit from the wheel hub face and fit the spare wheel.
13. Install the wheel bolts and tighten them by hand (in a clockwise direction). Then lightly tighten the wheel bolts in a crisscross sequence, with the wheel wrench.
14. Lower the vehicle completely and remove the jack.
15. Fully tighten the wheel bolts with the wheel wrench in a crisscross sequence, as shown.
16. Stow away the tools, jack and wheel.
17. Have the flat tyre repaired as soon as possible.



Crisscross Sequence



WARNING:

- **As soon as possible after changing a wheel, have the wheel bolts tightened with a torque wrench to 110 – 140 Nm and have the new wheel balanced on the vehicle.**
- **Wheel bolts should be tightened evenly, to the correct torque, in a crisscross pattern. Wheel bolts which have not been tightened properly could eventually allow the wheel to come off while the vehicle is moving!**

ENGINE OVERHEATING

WARNING:

Immediate action is required if the engine overheats. For physical reasons, the engine temperature gauge shows the correct temperature only if there is sufficient coolant in the cooling system. Should irregularities in the coolant temperature occur, for example if the gauge enters the red zone, check the coolant level immediately. Overheating can also be indicated by steam escaping from under the bonnet, a loss of power or a loud knocking or pinging noise.

Continued driving EVEN FOR A SHORT TIME could cause a fire, personal injury or vehicle damage.

Pull out of the traffic as soon as possible and stop the vehicle. Leave the engine idling and the park brake applied while you get out and check that the cooling fan is working.

WARNING:

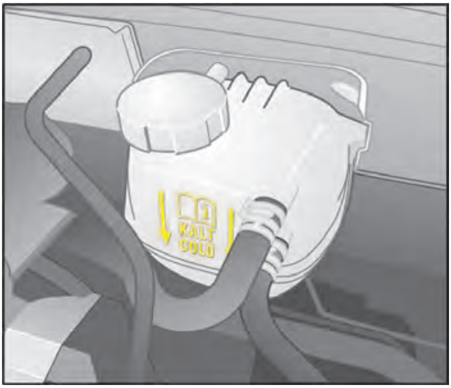
Do not open the bonnet if you can see or hear steam or coolant escaping from the engine compartment. Scalding fluid and steam can be blown out under pressure and cause serious burns. Wait until no steam or coolant can be seen or heard escaping before opening the bonnet.

1. If the fan is working and the temperature gauge needle has not returned to its normal position within a few minutes, stop the engine, remove the ignition key and proceed as follows:
2. Look for leaks in or around the radiator hoses and connections, the heater hoses and connections, the radiator and the water pump.
3. Take care when checking all of these areas as they will probably still be hot.
4. If you find a major leak or other problems that may have caused the engine to overheat, do not run the engine until these problems have been corrected.
5. If you do not find anything wrong, check the engine coolant level in the surge tank.

   When the engine is hot the level should be above the KALT / COLD mark.
6. If the level is below the KALT / COLD mark, fluid should be added.

WARNING:

Do not remove the cooling system cap if the engine and radiator are still hot.



ENGINE OVERHEATING cont.

7. When the engine has cooled sufficiently, remove the surge tank cap as follows:
    - Cover the surge tank cap with a thick cloth.
    - Slowly turn the cap anticlockwise, gradually releasing any residual pressure.
    - Remove the cap.
8. With the engine idling, fill the surge tank with clean water to the KALT / COLD mark.
9. Replace the cap and leave the engine idling for a few minutes.

If the temperature gauge no longer signals an overheat condition, you can resume driving at a reduced speed. Return to normal driving if the temperature gauge does not show an overheat condition again after 10 minutes.

If overheating occurs again, have the vehicle attended to by a qualified mechanic as soon as possible.

Note: With this type of sealed and pressurised cooling system, there should be very little loss of coolant. If the coolant level in the surge tank is low, a leak is indicated. Have your Holden Retailer locate and repair the leak.

The engine may temporarily operate at high temperatures during more demanding operating conditions, especially on very hot days. These conditions include:

- climbing a long hill
- immediately after high speed driving
- idling for long periods in traffic
- towing a heavily laden trailer or caravan.

Avoid operating your vehicle for prolonged periods in any of the above circumstances if the temperature gauge indicates high engine coolant temperature.

Refer to Chapter 7 for maintenance instructions to help protect your cooling system from overheating.

FLAT BATTERY

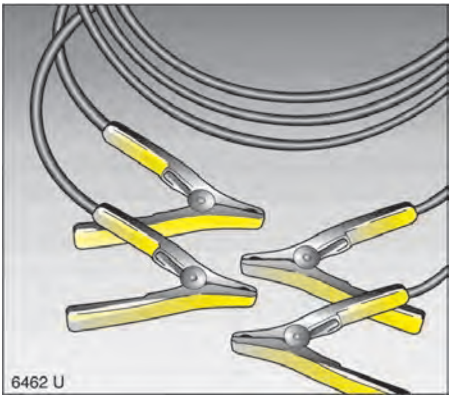
WARNING:

DO NOT attempt to push start or tow start this vehicle, as it is fitted with a catalytic converter. If uncombusted fuel reaches the catalytic converter and ignites, the converter could overheat or be destroyed by backfire.

If your vehicle will not start due to a discharged battery, it may start using the energy from a battery in another vehicle; a procedure called jump starting.

Read the following procedure in full before attempting to jump start your vehicle.

If after reading the following procedure you are still unsure about jump starting, we strongly recommend (for your safety and that of your vehicle) that you leave the starting to a competent mechanic.



WARNING:

Batteries produce explosive gases, contain corrosive acids and supply levels of electrical current high enough to cause burns. Therefore, to lessen the chance of personal injury when working near a battery:

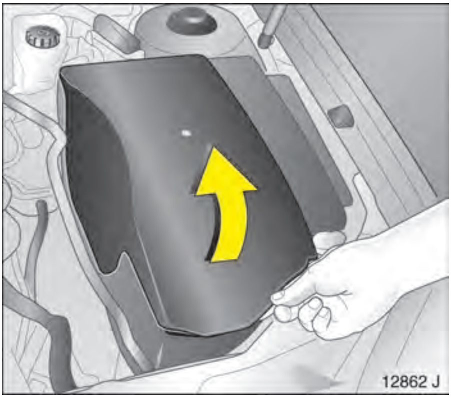
- **Do not expose the battery to open flames or sparks. Battery action generates hydrogen gas which is flammable and explosive.**
- **Do not smoke near a battery.**
- **Wear eye protection such as industrial safety glasses and avoid leaning over the battery whenever possible.**
- **Do not allow battery acid to contact eyes or skin. Flush any contacted area with water immediately. In case of eye contact you should get medical help. Battery acid also damages paint and fabrics. To minimise damage, wash off immediately.**
- **Be sure any batteries that have filler caps are properly filled with fluid.**
- **Remove rings, metal watch bands and other metal jewellery before working around the battery.**
- **Carefully follow each step in the jump starting procedures.**
- **Never use a quick charger to start your engine.**
- **Do not lean over the battery during jump starting.**

FLAT BATTERY cont.

Jump starting precautions

- The battery of your vehicle has a negative earth and a 12 volt rating. The battery in the assisting vehicle must be the same voltage and polarity (negative earth).
- The capacity of the charged battery must not be substantially lower than that of the discharged battery. Check the specifications of both batteries to ensure that they comply. Serious injury or damage may result if the wrong type of battery is used.
- Position the two vehicles so that they are not touching, apply the park brakes and for vehicles with an automatic transmission, select P (park), or manual transmission, select N (neutral).
- Turn off the ignition and all lights and accessories in both vehicles, except for the those needed for the work area (i.e. hazard lights).
- Access the flat battery by pulling the battery case cover forwards and upwards, as illustrated.
- Access the assisting vehicle battery.

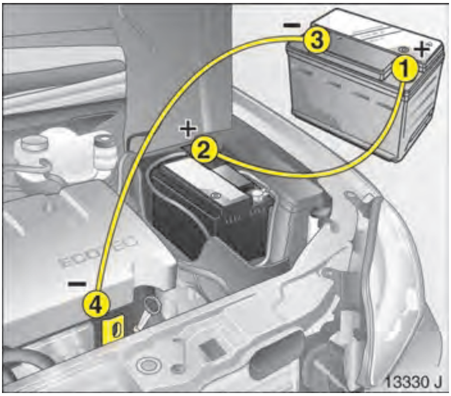
Note: Always use spike protection jumper leads to avoid damage to electrical components.



Jump starting connections

When making all connections, take care that the clamps from one cable do not inadvertently touch the clamps on the other cable.

Also, ensure that jumper cables are not on or near pulleys, fans or other points that will move when the engine is started.



1. Attach one end of the first jumper cable to the positive terminal of the assisting battery (+ or P on the battery case or battery post).
2. Connect the other end of the same cable to the positive terminal of the flat battery.
3. Attach one end of the second jumper cable to the negative terminal of the assisting battery (– or N on the battery case or battery post).
4. Connect the other end of the second cable to a solid, stationary, metallic point on the engine with the flat battery (i.e. the engine block). DO NOT connect directly to the negative post of the flat battery. The connection should be as far away from the flat battery as possible.

FLAT BATTERY cont.

Jump starting continued

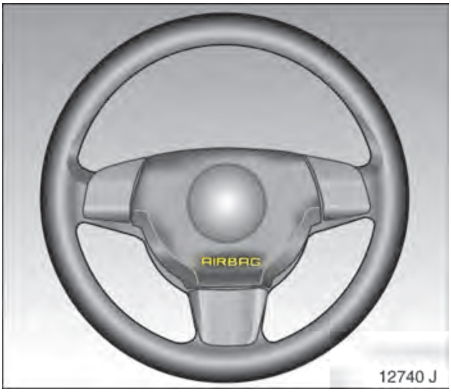
5. Start the engine in the assisting vehicle and run the engine at a moderate speed.
6. Start the engine in the vehicle with the flat battery.

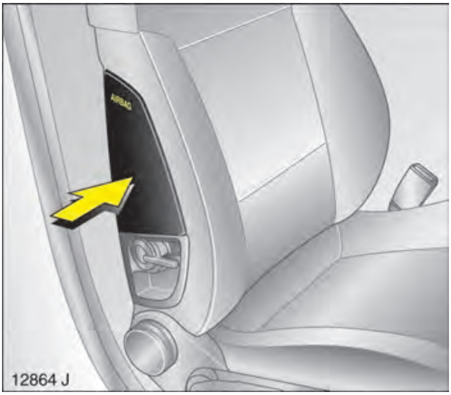
   Note: Attempts to start the engine with the flat battery should be made at intervals of 1 minute and should not last longer than 15 seconds.
7. After starting, allow both engines to idle for approximately 3 minutes with the cables connected.
8. Leave the engines running as you remove the jumper cables.
9. Remove the cables in the reverse order of the connecting procedure. While removing each cable clamp, take care that it does not touch any moving parts or any other metal, especially while the other end remains attached.

AIRBAGS

The airbag system is identified by the word Airbag at the airbag locations (on the steering wheel, glovebox and the door-side of the front seats).

The driver and passenger airbags operate as a pair, that is, they are triggered simultaneously.

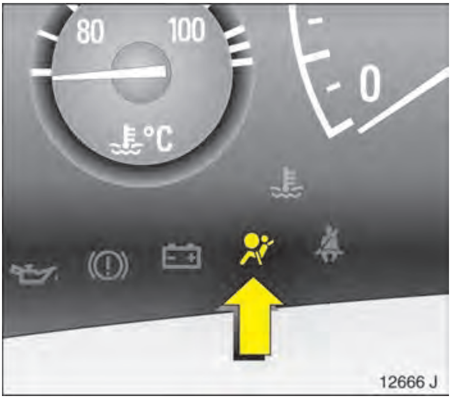




Warning light

The light in the instrument panel illuminates for a few seconds when the ignition is switched on.

If the light does not go out or if it illuminates when driving, a defect in the system is indicated. The airbag system may not function correctly, especially in an accident. Consult your Holden Retailer as soon as possible.



AIRBAGS cont.

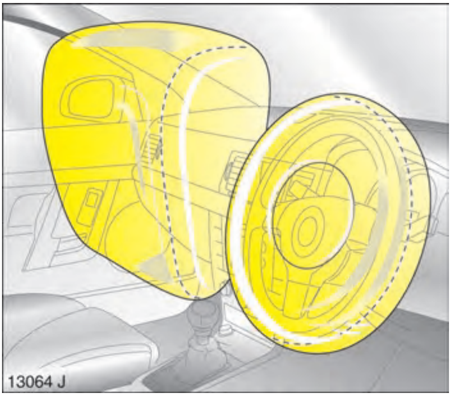
Operation

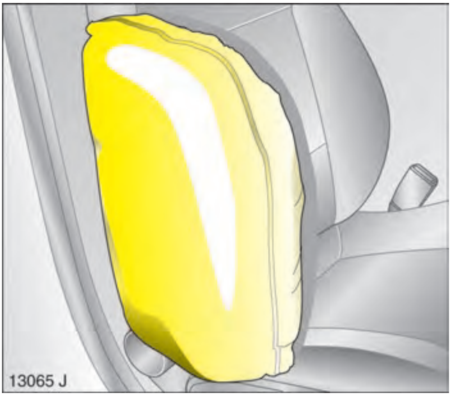
If your vehicle is involved in a moderate to severe front end collision, the front airbags will inflate, assisting the seat belts to restrain forward body movement.

When triggered, the airbags inflate in milliseconds and form a safety cushion for the driver and front passenger. Forward movement and movement in the respective door areas is cushioned substantially reducing the risk of injury.

Impairment of view will not occur as the airbags quickly deflate; the whole process taking only a moment.

An operating noise may be heard and a small amount of smoke-like gas will be released. The gas is harmless and does not indicate malfunction or fire.





Note:

- The airbags assist, but do not replace the seat belts.
- The front airbags are not designed to inflate if the vehicle is hit from the rear or side or if the vehicle overturns.
- Seat belts should be worn by all occupants (by law) whenever the vehicle is moving.
- Airbags inflate with great force. If you are too close to an inflating airbag it could seriously injure you. Seat belts help keep you in position in a crash.
- The airbags inflate with extreme rapidity. It is, therefore, important that seats are correctly adjusted. Adjust the driver's seat to suit the driver's height; the driver should be sitting upright with slightly bent arms when holding the upper spokes area of the steering wheel. The passenger seat should be as far back as possible, with the back rest upright.

Independent operation

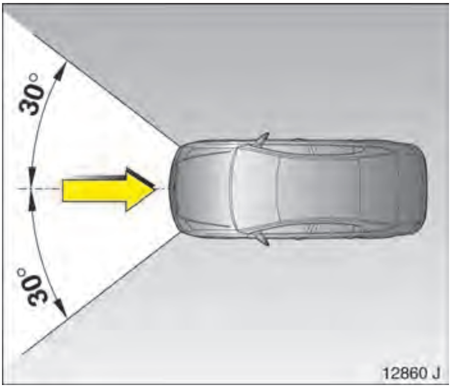
The front airbags are triggered independently of the side airbags and the side airbags are triggered independently of the front airbags.

AIRBAGS cont.

Impacts – front airbag inflation

The front airbags will inflate if the vehicle is struck with moderate to severe force within the non-shaded section illustrated.

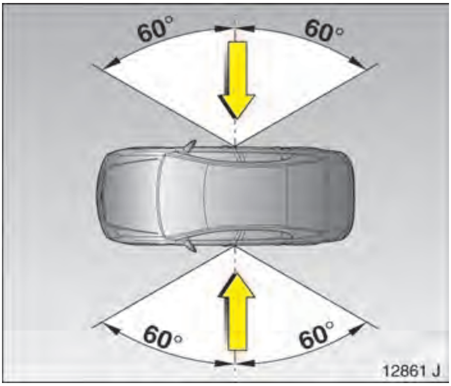
The front airbags will not inflate if the vehicle is struck from the side, rear or in some rollovers. Always wear a seat belt.



Impacts – side airbag inflation

The side airbags (on the side of impact) will inflate if the vehicle is struck with moderate to severe force within the non-shaded section illustrated.

The driver or passenger side airbag will not inflate if the vehicle is struck outside the range shown in the illustration. Always wear a seat belt.



After use, the whole airbag system will have to be replaced. It is recommended that this work is done by a Holden Retailer.

The system should also be inspected by a Holden Retailer if the steering wheel or dashboard area is scratched, cracked or damaged. Remember to keep the horn pad area clear, as failure to do this may hinder airbag operation.

AIRBAGS cont.

The electronics controlling the airbag system and belt pretensioners are located in the centre console. To prevent malfunctions, do not place magnetic objects in the immediate vicinity of the console.

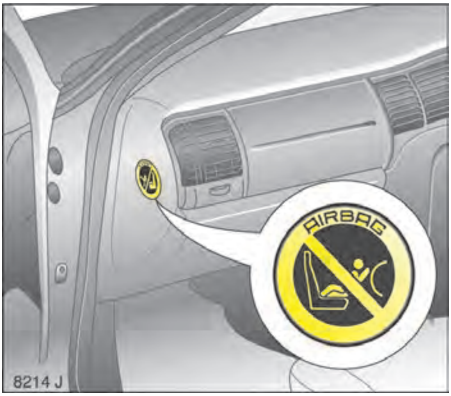
Extensive design and testing has gone into the airbag system. It should however, be treated with respect. Any careless or unskilled interference with the system could lead to its failure or to accidental deployment. Any work to the electrical system, steering column, dashboard area, steering wheel or airbag system should be carried out by an authorised Holden Retailer.

WARNING:

- **Front passenger's airbag:**
  The dashboard area must be kept clear. Do not place any objects over the dashboard or between an airbag and yourself. Nothing should hang from the sun visor or mirror and a passenger must not rest their feet on the dashboard.
- **Driver's airbag:**
  The horn pad must not be covered with adhesive or any other material. The driver should adjust the seat as far back as possible and sit back as far as possible while still maintaining control of the vehicle.
- **Side impact airbags:**
  Do not fit unauthorised seat covers as they may impair the deployment of the side impact airbags. Do not position your body or any object (including pillows) between front seats and doors. Front seat occupants should not lean on or sleep against the door. Always sit centrally in the seat.

AIRBAGS cont.

Airbag and child restraints



WARNING – EXTREME HAZARD:

- **Do not use a rearward facing child restraint on a seat protected by an airbag in front of it. The child could be seriously injured if the airbag inflates, as the child's head would be very close to the inflating airbag.**

- **Never install a child restraint in the front seat of a vehicle fitted with Side Impact Air Bags. Remember that it is safest for children to be seated in the rear seats.**

Refer to Chapter 3 for further information about fitting a child restraint.

Do not touch any airbag system internal components or wires. The wires can be identified by yellow taping or yellow tubing and the connectors are also yellow.

Scrapping a vehicle that has an uninflated airbag or airbags can be hazardous. Ask your Holden Retailer for assistance.

Bull bar fitment

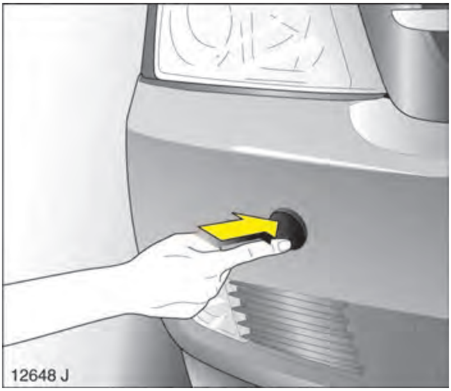
Fitting a bull bar, or making other modifications to the front of the vehicle, may change the impact speed which would normally cause the airbag (or airbags) to inflate, reducing its effectiveness. Bull bars should not be fitted to vehicles operating in suburban areas, as they increase the risk of injury to a pedestrian in the event of a collision. Bull bars are recommended only for country / outback areas, where additional protection from straying animals is required. Please remember that defensive driving and limiting driving speed to the road conditions is always the best approach, particularly where roadside signs indicate wildlife is abundant.

TOWING YOUR VEHICLE

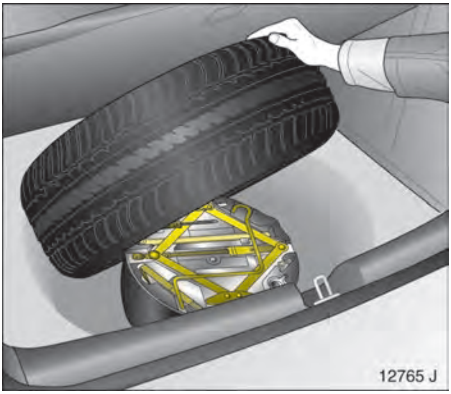
Proper lifting or towing equipment is necessary to prevent damage during any towing operation of the vehicle. State and local laws must be followed. In an emergency, your vehicle may be towed on all four wheels, as follows:

1. Open the cover concealing the hole for the towing eye, located at the front, driver's side of the vehicle.

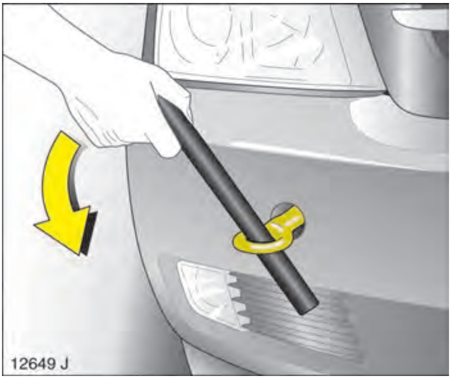
   To open the cover, press the bottom edge and pull the cover out.



2. Locate the towing eye in the luggage compartment with the jack and vehicle tools under the spare wheel.



3. Screw the towing eye in anticlockwise as far as it will go. Use the wheel bolt wrench to tighten the eye until it is horizontal.



TOWING YOUR VEHICLE cont.

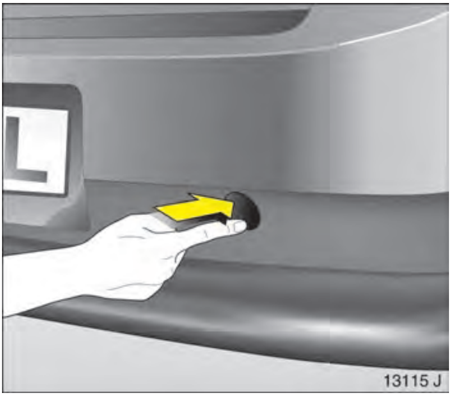
4. Attach a tow rope or tow rod to the eye. Do not attach it to the bumper bars or brackets.
5. Place the transmission in N (neutral) and release the park brake.
6. Switch on the ignition to free the steering lock and allow correct operation of the windscreen wipers, horn and turn signals.

Note:

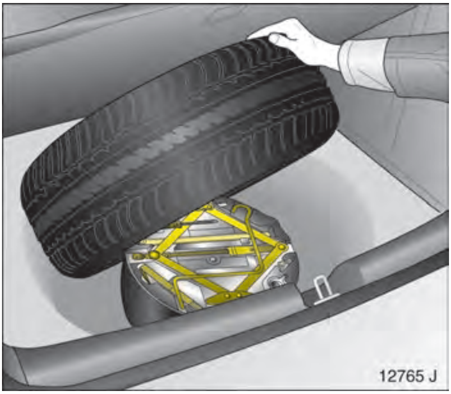
- For safety and to prevent damage to the vehicles, avoid jerky movements and drive slowly during towing operations.
- Remember that power assisted brakes and power steering will not be available when the engine is off. Therefore, significantly more effort will be required to brake and steer.
- To prevent the entry of exhaust fumes from the towing vehicle into the passenger compartment of your vehicle, close the windows and move the ventilation controls to the recirculate position.
- Vehicles fitted with automatic transmission:
  - should only be towed facing forwards
  - must not be towed for further than 100 km
  - must not be towed faster than 80 km/h.
- If the transmission is defective or if the above speed or distance is to be exceeded, the front wheels must be raised.
- Only the driver should be in a towed vehicle.

TOWING ANOTHER VEHICLE

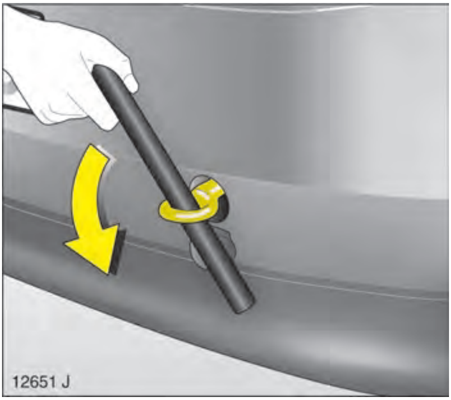
1. Open the cover concealing the hole for the towing eye, located at the rear, driver's side of the vehicle.



2. The towing eye is located in the luggage compartment, under the spare wheel, with the jack and vehicle tools.

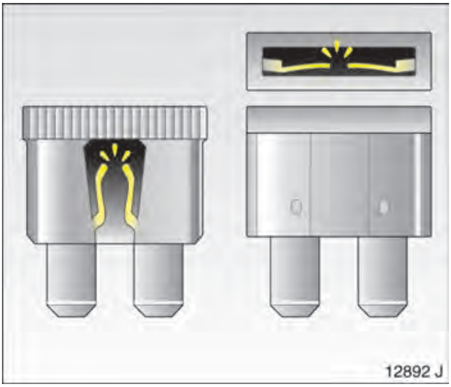


3. Screw the towing eye in anticlockwise as far as it will go. Use the wheel bolt wrench to tighten the eye until it is horizontal.
4. Attach a tow rope or tow rod to the rear towing eye, never to the rear axle. Drive off slowly avoiding jerky movements.



FUSES

Blade type fuses are used in this vehicle. The amperage value (A) is moulded into the body of each fuse.



Fuse replacement

Before removing a suspect fuse, turn off the ignition and any related switches. Examine the element in the fuse. A defective fuse can be recognised by its melted element.

If the element has melted, locate and repair the cause of the circuit overload and replace the fuse with one of the same rating.

FUSE COLOUR RATING

Violet	3 A
Pink	4 A
Beige	5 A
Brown	7.5 A
Red	10 A
Blue	15 A
Yellow	20 A
White	25 A
Green	30 A
Orange	40 A

Consult your Holden Retailer if assistance is required.

WARNING:

When replacing a fuse, be sure to use a fuse of the specified amperage. Never install a wire or similar device to replace a fuse as this could damage electrical components and may cause a fire hazard to your vehicle.

Fuse locations

There are three fuse boxes in this vehicle, outlined in the following pages:

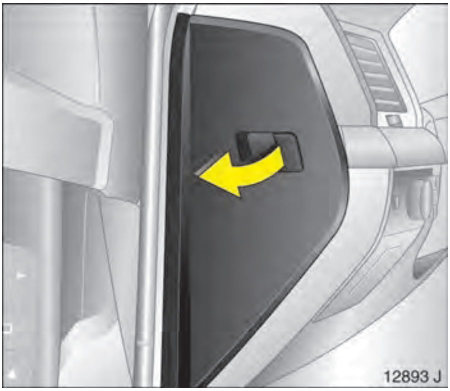
- Passenger side fuse box – left-hand end of the dashboard (facing the door)
- Luggage area fuse box – left-hand storage compartment
- Engine bay fuse box – front, left-hand side of the engine bay.

FUSES cont.

Passenger side fuse box

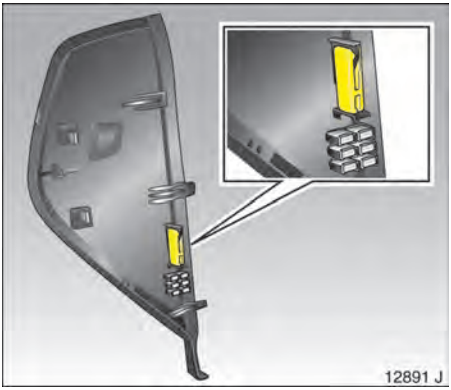
To remove the cover, pull firmly on the handle and lift out.

It is advisable to carry a full set of spare fuses. These are available from your Holden Retailer.

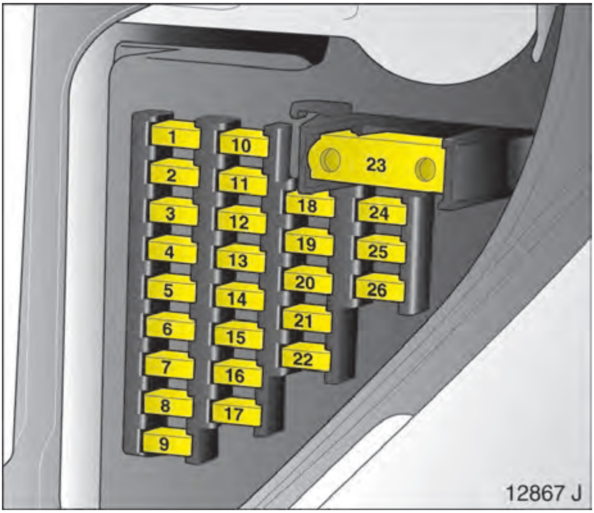


A fuse gripping tool is supplied in the fuse box cover to aid in fuse removal.

Spare fuses can be stored in this fuse box cover.



FUSES cont.



The following list includes fuses and the most important circuits that they protect. Some circuits may be protected by several fuses.

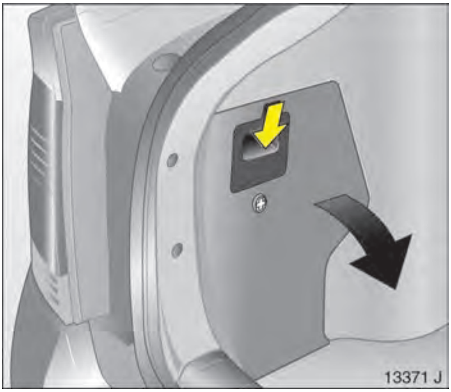
1	Radio	20 A
2	Interior fan, heating, air conditioning	7.5 A
3	Sun roof	20 A
4	–	–
5	Door module control unit	7.5 A
6	Brake light	7.5 A
7	Bodywork module control unit	30 A
8	Control unit Front passenger door module	30 A
9	Central control unit	7.5 A
10	Control unit Steering column module	7.5 A
11	Diagnostics plug	5 A
12	Battery overload protection	15 A
13	–	–
14	–	–
15	Control unit Driver's door module	30 A
16	–	–
17	Instruments, information display	15 A
18	Air conditioning system	7.5 A
19	–	–
20	Yaw sensor (ESP, if fitted)	7.5 A
21	–	–
22	Cigarette lighter (if fitted)	30 A
23	Interior fan, air conditioning system, climate control	40 A
24	–	–
25	Heating, air conditioning	7.5 A
26	Instruments, information display	7.5 A

FUSES cont.

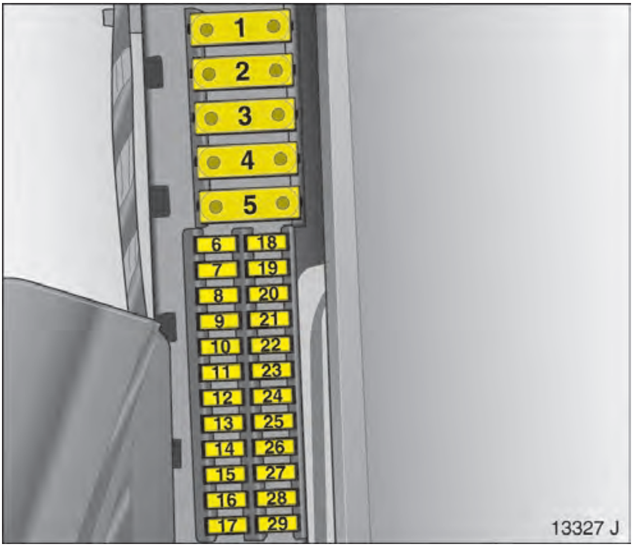
Luggage area fuse box

To remove the cover, push the bar down and open the cover.

It is advisable to carry a full set of spare fuses. These are available from your Holden Retailer.



FUSES cont.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13327 J

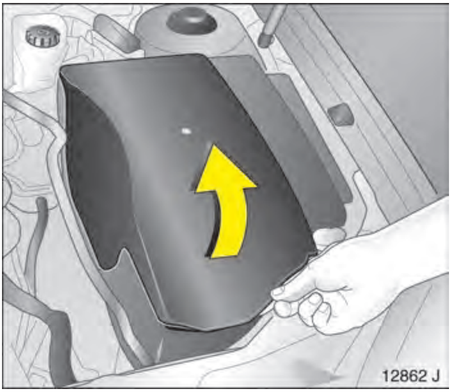
The following list includes fuses and the most important circuits that they protect. Some circuits may be protected by several fuses.

1	–	–
2	–	–
3	–	–
4	Rear demister	40 A
5	–	–
6	Electric windows	30 A
7	Electric windows	30 A
8	–	–
9	Horn	15 A
10	Fuel pump	20 A
11	Battery voltage, terminal 30	25 A
12	–	–
13	Towing equipment	20 A
14	Rear window wiper	15 A
15	–	–
16	–	–
17	–	–
18	–	–
19	Tank flap	7.5 A
20	–	–
21	–	–
22	–	–
23	–	–
24	Battery voltage, terminal 30	25 A
25	–	–
26	–	–
27	Air conditioning	5 A
28	–	–
29	–	–

FUSES cont.

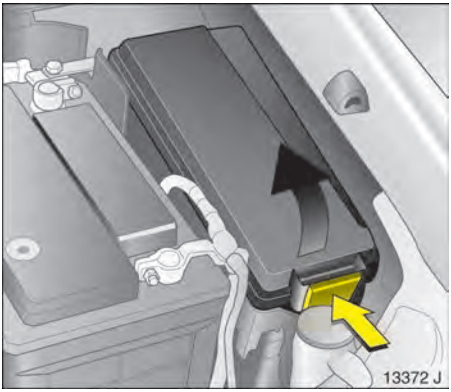
Engine bay fuse box

To remove the fuse box cover, first remove the battery cover; pull it forward and upwards.

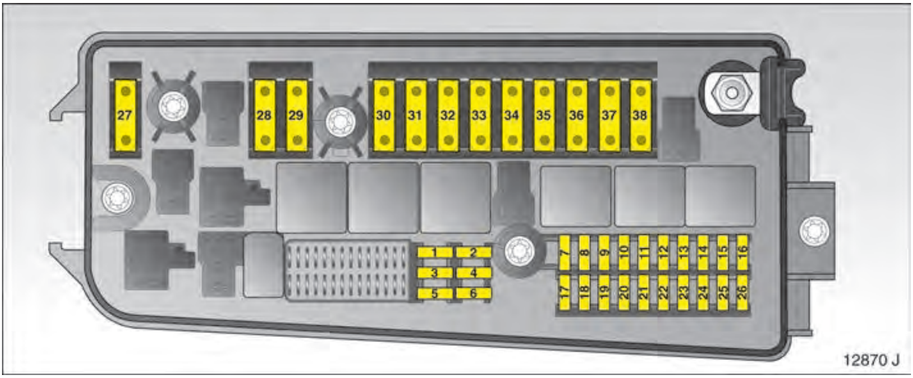


To remove the fuse box cover, push the latch and lift as illustrated.

Fuse symbols are shown on the inside of the cover. It is advisable to carry a full set of spare fuses. These are available from your Holden Retailer.



FUSES cont.



The following list includes fuses and the most important circuits that they protect. Some circuits may be protected by several fuses.

1	Engine electronics, transmission electronics	20 A
2	Starter motor	25 A
3	Horn	20 A
4	Air conditioning, climate control	10 A
5	Windscreen washer system	15 A
6	–	–
7	Central control unit, traction control, Electronic Stability Program	15 A
8	Headlights	10 A
9	–	–
10	–	–
11	Windscreen wiper	30 A
12	Windscreen wiper	30 A
13	Central control unit, traction control, Electronic Stability Program	7.5 A
14	–	–
15	Exhaust gas sensors	10 A
16	ABS	7.5 A
17	–	–
18	–	–
19	Headlight range adjustment	5 A
20	–	–
21	–	–
22	–	–
23	Auxiliary heating	20 A
24	Battery voltage, terminal 30	30 A
25	Battery voltage, terminal 30	30 A
26	–	–
27	–	–
28	Tailgate module control unit	60 A
29	ABS	40 A
30	Tailgate module control unit	60 A
31	Vehicle interior module control unit	60 A
32	ABS	40 A
33	Vehicle interior module control unit	60 A
34	Tailgate module control unit	60 A
35	Cooling fan	20 A
36	Cooling fan	30 A
37	–	–
38	–	–

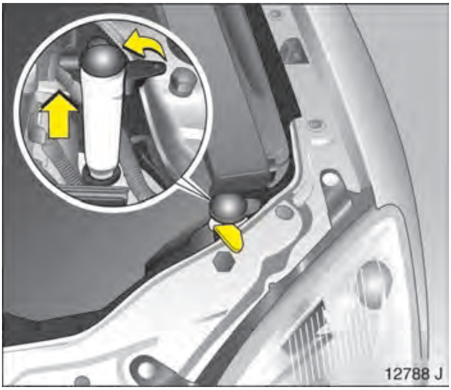
BULB REPLACEMENT

WARNING:

- **When replacing a bulb, turn off the related switch.**
- **Do not touch new bulbs with bare hands. Grease from fingers can cause dull light and may significantly reduce the life of the bulb. Grease spots on halogen bulbs will, within a short time lead to bulb failure. Stained bulbs can be cleaned with tissue paper or a clean, non-fuzzy cloth using alcohol or white spirits.**
- **When replacing bulbs, do not exceed the wattage rating on the base of the defective bulb.**
- **Detailed procedures for headlight aiming are provided in the relevant service manual for your vehicle. However, because headlight aiming is a safety item, it is recommended that you have it carried out by your Holden Retailer.**

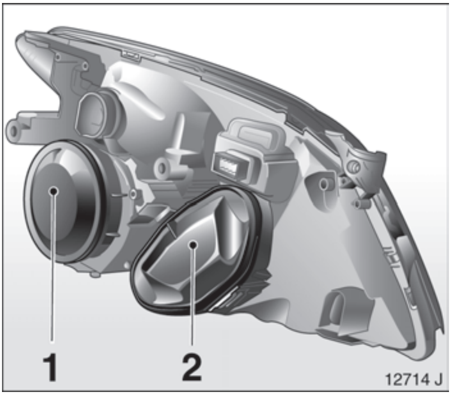
Note: If you are replacing a bulb on the left-hand side of the vehicle, remove the washer bottle filler neck for easier access.

To remove the filler neck, disengage the retaining clamp and pull the filler neck upwards. Washer fluid may escape if the bottle is full.



Headlights

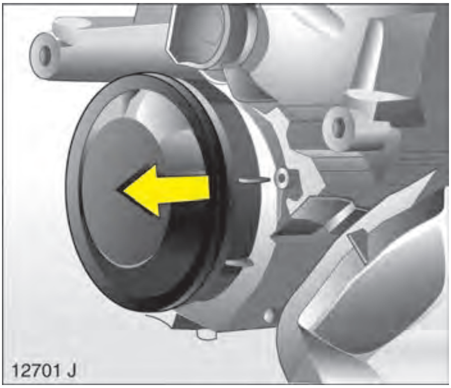
Separate bulbs are used for low beam and high beam. The outer bulb **1** is for low beam and the inner bulb **2** is for high beam.



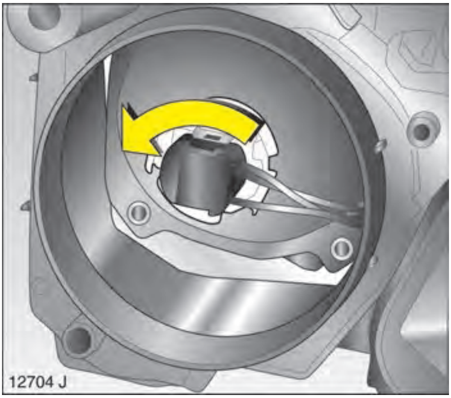
BULB REPLACEMENT cont.

LOW BEAM

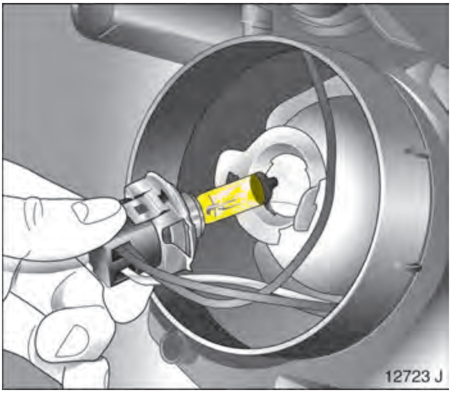
1. Open the bonnet.
2. Remove the headlight protective cover.



3. Rotate the bulb holder anticlockwise to disengage it.

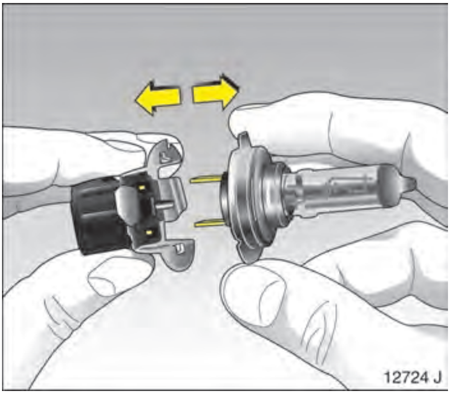


4. Remove the bulb holder with the bulb from the reflector housing.



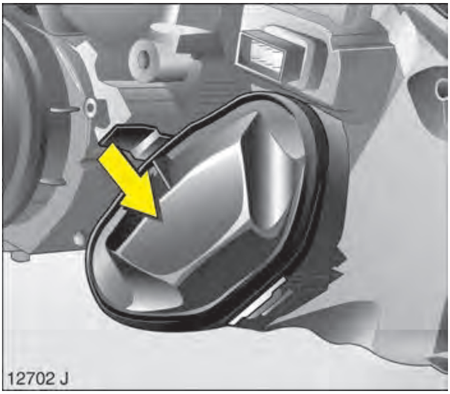
BULB REPLACEMENT cont.

5. Detach the bulb from the bulb holder.
6. Without touching the glass, insert the new bulb into the bulb holder.
7. Install the bulb and bulb holder so that the lugs on the bulb holder engage in the reflector recesses.
8. Rotate the bulb holder clockwise to fully engage the bulb holder.
9. Install the headlight protective cover.
10. If the washer bottle filler neck was removed, install the filler neck.
11. Check the light operation.

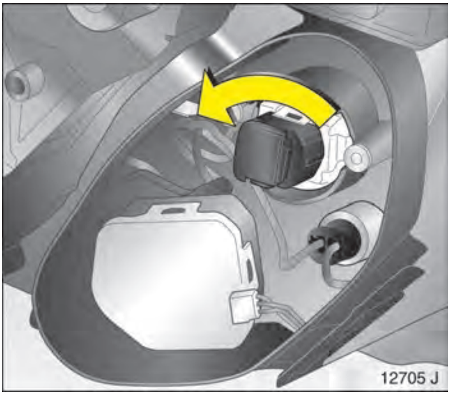


HIGH BEAM

1. Open the bonnet.
2. Remove the headlight protective cover.

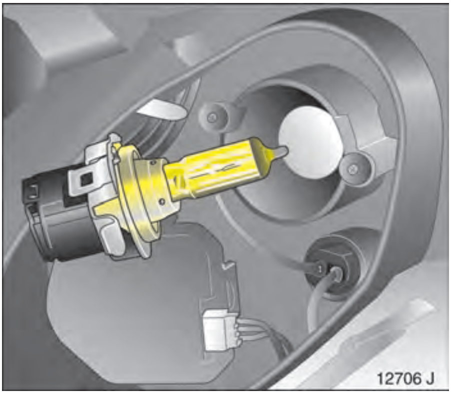


3. Rotate the bulb holder anticlockwise to disengage it.

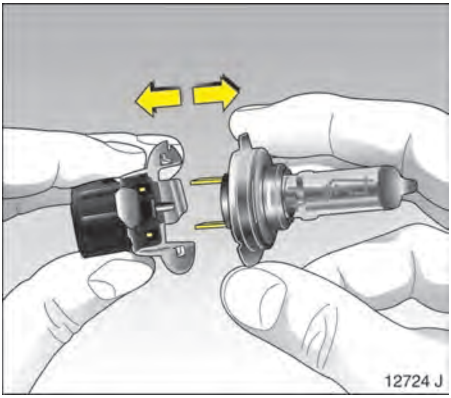


BULB REPLACEMENT cont.

4. Remove the bulb holder and the bulb from the reflector housing.



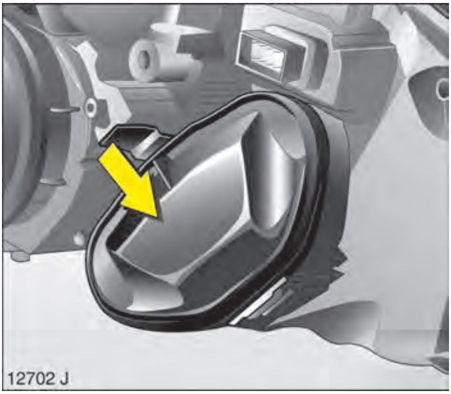
5. Detach the bulb from the bulb holder.
6. Without touching the glass, insert the new bulb into the bulb holder.
7. Install the bulb and bulb holder so that the lugs on the bulb holder engage in the reflector recesses.
8. Rotate the bulb holder clockwise.
9. Install the headlight protective cover.
10. If the washer bottle filler neck was removed, install the filler neck.
11. Check the light operation.



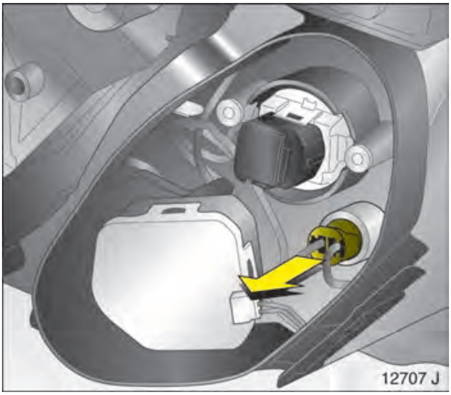
BULB REPLACEMENT cont.

Park lights

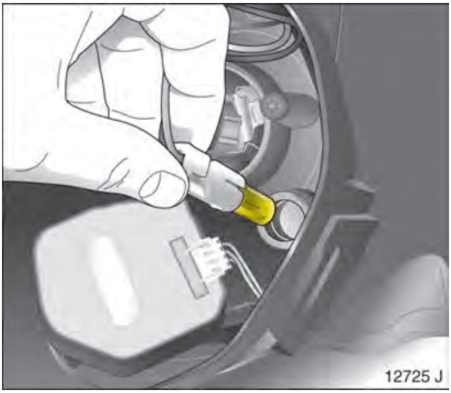
1. Open the bonnet.
2. Remove the high beam protective cover.



3. Remove the park light bulb and bulb holder from the reflector.
4. Remove the bulb from the bulb holder.
5. Insert the new bulb so that the two lugs on the bulb base engage in the bulb holder recesses.

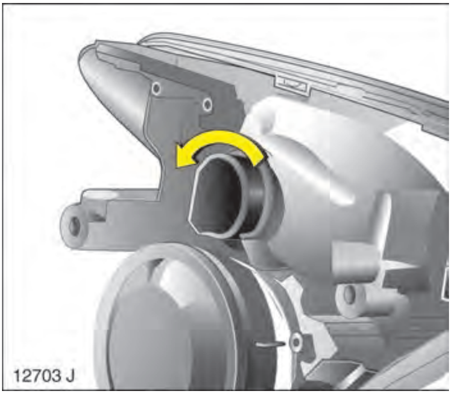


6. Insert the bulb holder into the reflector.
7. Install the high beam protective cover.
8. Check the light operation.

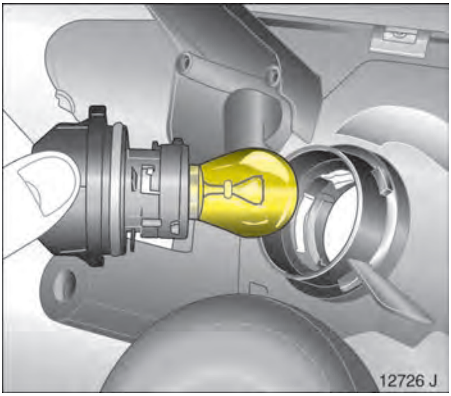


BULB REPLACEMENT cont.

Front turn signals



1. Open the bonnet.
2. Disengage the bulb and bulb holder by turning it anticlockwise.



3. Remove the bulb from the bulb holder by pressing gently and turning it anticlockwise.
4. Insert the new bulb, locating the lugs at the side of the bulb with the recesses in the bulb holder. Gently press it into the holder as you turn the bulb clockwise.
5. Insert the bulb holder into the reflector.
6. Check the light operation.

Holden Retailer bulb replacement

Bulb replacement for the following lights should be carried out by your Holden Retailer:

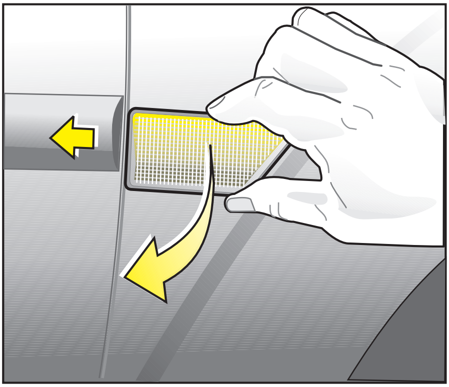
- Instrument illumination.
- Information display illumination.
- Front fog lights (if fitted)
- Rear reading lights (if fitted)
- Sun visor lights (if fitted)
- Centre mounted stop light.

BULB REPLACEMENT cont.

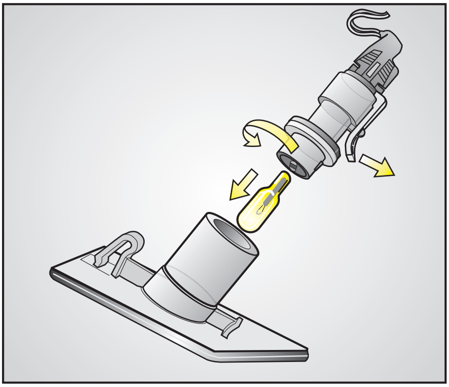
Side turn signals

Note: Some models are fitted with a clear lens over a yellow coloured bulb. Ensure the correct coloured bulb is fitted when replacing a faulty bulb.

1. Grasping the rearward end of the lens, push forwards and manoeuvre the lens away from the body of the vehicle.



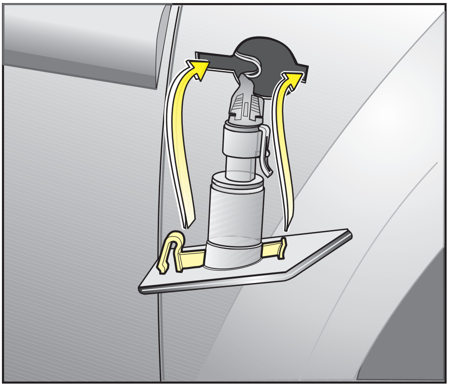
2. Rotate the bulb holder anticlockwise and separate it from the lens assembly.
3. Pull the bulb out of the bulb holder.



4. Insert the new bulb into the bulb holder.
5. Install the bulb holder into the lens housing.

Note: The bulb holder fits into the lens housing one way. Turn the bulb holder until it fits into place and can be tightened.

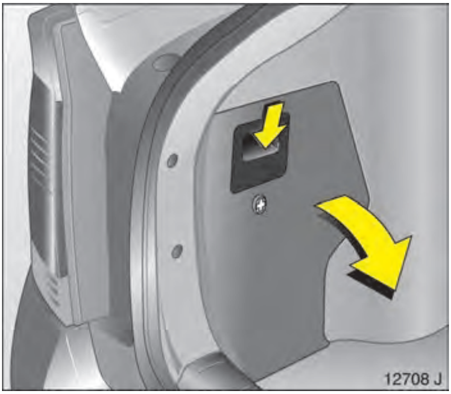
6. Install the rear of the housing into the vehicle body.
7. Push the front of the lens inwards and engage the clip.
8. Check the light operation.



BULB REPLACEMENT cont.

Brakes, rear turn signals, reverse and tail lights, rear fog lights

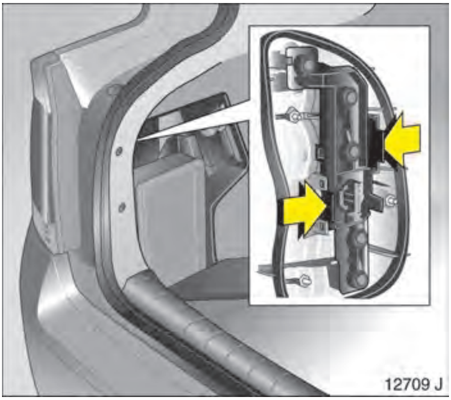
1. Remove the cover by pressing the bar and lifting out, as illustrated.



2. Detach the wiring connector from the bulb housing.
3. Press the two retaining lugs on the outer edges of the bulb housing towards each other and lift the bulb housing out.

   BULB SEQUENCE
   From top to bottom:

   - Turn signal light
   - Brake / tail light
   - Tail light
   - Fog light
   - Reverse light



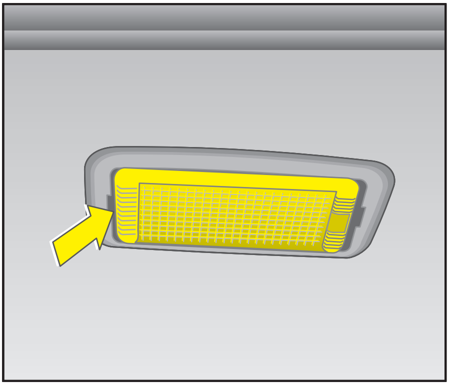
4. Remove the faulty bulb from the bulb holder.
5. Insert the new bulb.
6. Install the bulb holder.
7. Install the cover.
8. Install the wiring connector to the bulb housing.
9. Check the light operation.

BULB REPLACEMENT cont.

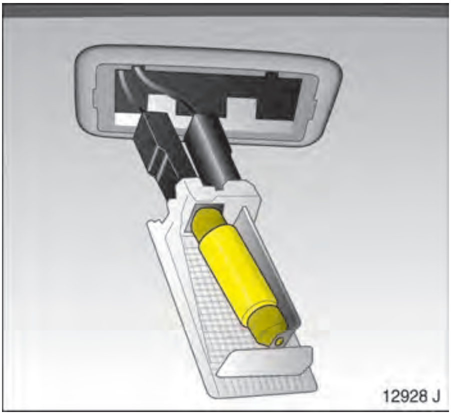
Glove compartment light and luggage compartment light

Before removing the luggage compartment light, hold down the contact switch so that the light is not live.

1. Prise the light assembly out of the recess using a screwdriver.



2. Press the bulb slightly towards the spring clip and lift the bulb out.
3. Without touching the glass, insert the new bulb.
4. Install the light assembly.
5. Check the light operation.

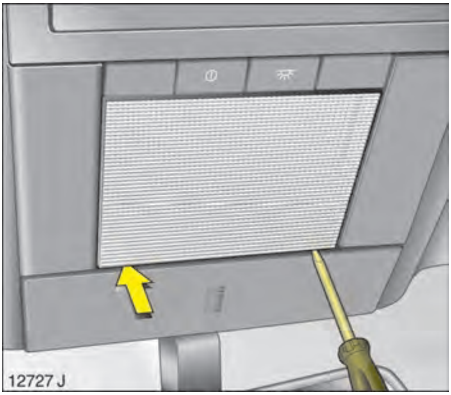


BULB REPLACEMENT cont.

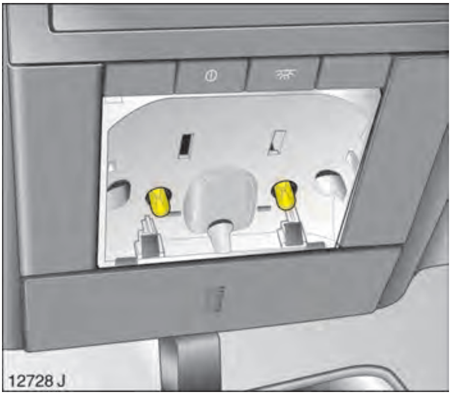
Front dome light and front reading light (if fitted)

Before removing the dome light, close the doors so that the light is not live.

1. Lever the lens out of the dome light housing using a screwdriver, as illustrated.



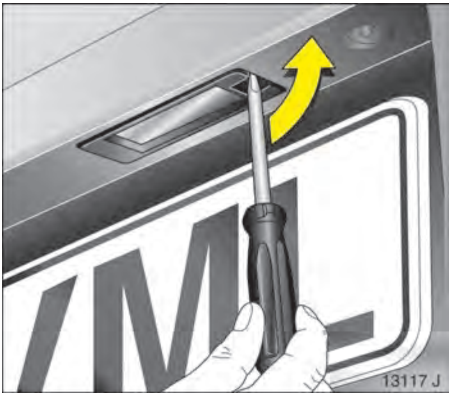
2. Remove the bulb from the holder.
3. Insert the new bulb.
4. Install the lens into the dome light housing.
5. Check the light operation.



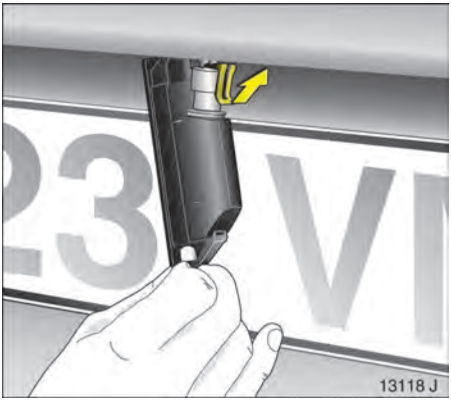
BULB REPLACEMENT cont.

Number plate light

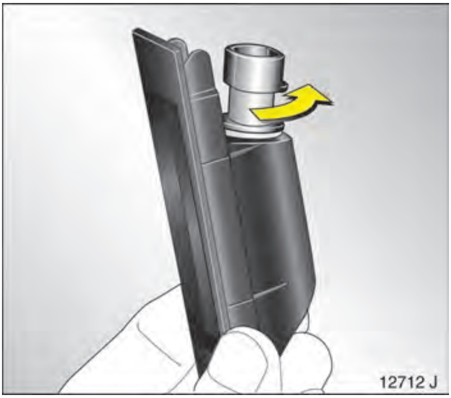
1. Insert a screwdriver into the recess in the right-hand side of the light.
2. Press towards the right, as illustrated, and disengage the spring.



3. Manoeuvre the light housing out without pulling on the wiring.
4. Raise the wiring connector clip and detach the bulb holder from the connector.



5. Rotate the bulb holder anticlockwise to disengage and remove the bulb holder (and bulb) from the light housing.
6. Remove the bulb from the bulb holder.
7. Insert a new bulb into the bulb holder.
8. Install the bulb holder into the light housing and engage the bulb holder by turning it clockwise.
9. Connect the wiring connector to the light housing.
10. Install the light housing.
11. Check the light operation.



TRANSMISSION PARK LOCK

Automatic transmission only

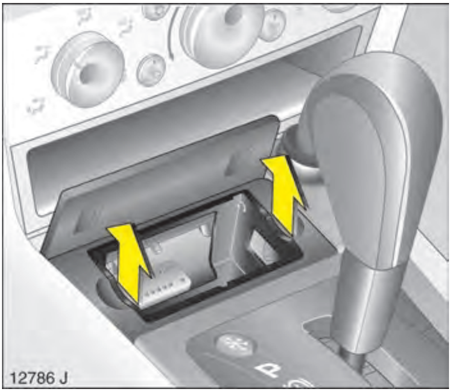
For safety, the transmission has an electric park lock so that the key must be in the ignition (and the ignition on) before the shift lever can be moved away from the P (park) position.

Flat battery

If the vehicle battery is flat, the electric park lock prevents the shift lever from being moved away from the P position.

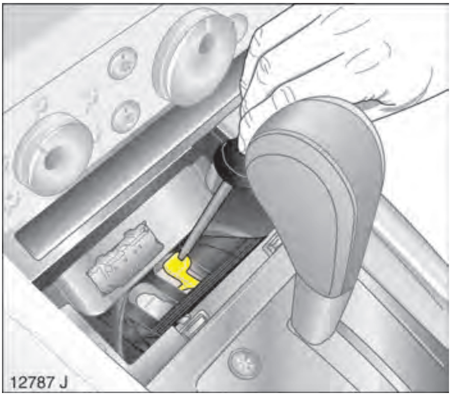
To unlock the shift lever:

1. Apply the park brake.
2. Remove the ashtray, as illustrated.
3. Pull the ashtray socket upwards and out.



4. Push the release bar down with a screwdriver, as illustrated, and move the shift lever away from the P position.
5. Install the ashtray socket into the centre console ensuring that it latches into position.
6. Install the ashtray.

Note: Returning the shift lever to the P position locks the lever again. Consult your Holden Retailer to repair the cause of the flat battery.



CHAPTER 7

Weekly checks

Page
7-2 Miscellaneous checks
7-3 Engine oil level
7-5 Engine coolant level
7-6 Brake fluid level
7-6 Power steering fluid level
7-7 Washer fluid level
7-7 Battery
7-8 Tyres

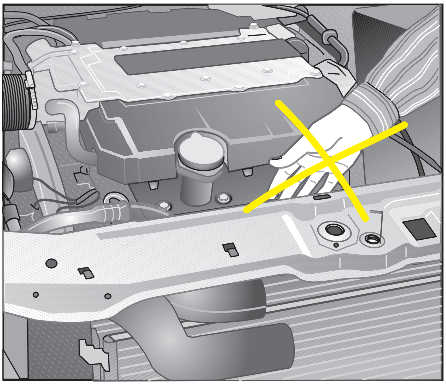
MISCELLANEOUS CHECKS

As well as taking your vehicle to be serviced (refer to Chapter 12) there are a few simple, weekly checks that the owner / operator is recommended to make. These are outlined on the following pages.

The following checks should also be regularly performed to ensure proper safety and dependability of your vehicle.

WARNING:

- **If the engine temperature is high, the cooling fan may remain on for several minutes after turning off the ignition.**
- **The engine cooling fan can start working unexpectedly, even when the engine is not running and the ignition is off.**



WARNING:

Electronic ignition systems have a high ignition power. Do not touch the ignition system; this could be highly dangerous.

CHECK THE FOLLOWING:

- All exterior lights are working and that their appropriate interior indicators light up when in operation.
- Mirrors and glass are clean and not scratched.
- Automatic transmission shift lever indicator correctly lines up next to the gear selected.
- Aim of water on the windscreen and tailgate and the condition of the wipers is satisfactory.
- Demister operates.
- Safe condition and operation of all seat belts (give each belt a sharp tug to make sure that it ‘locks’).
- Seat belt buckles are clean and operating correctly.

ENGINE OIL LEVEL

It is normal for every engine to consume some oil. For this reason the engine oil level should be checked every 500 km and before starting a long trip.

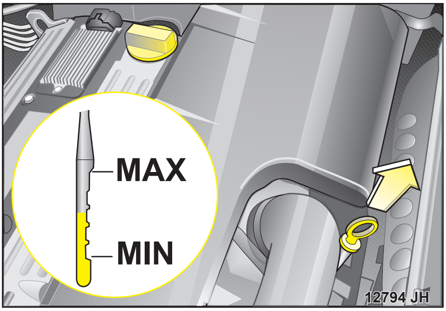
Check the oil level

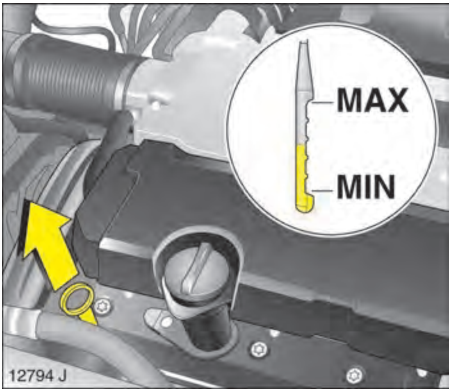
Check the oil level while the vehicle is parked on level ground and the engine is switched off and at normal operating temperature.

Before checking the oil level, wait at least 5 minutes after switching the engine off, to allow the oil to settle.If the engine is cold the oil may take considerably longer to drain back.

1. Remove the oil dipstick from the oil level tube.
2. Wipe the dipstick clean.
3. Insert the dipstick back into the oil tube as far as it will go.
4. Wait for a few seconds before again removing the dipstick.
5. Check the oil level.

The oil level should be maintained between the MIN and MAX level indicators.





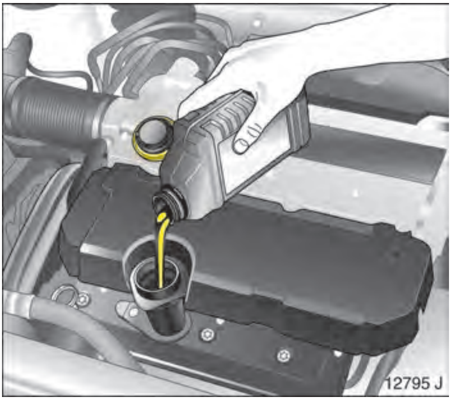
ENGINE OIL LEVEL cont.

Add oil

Use the correct engine oil for your vehicle. Refer to Chapter 8.

1. Remove the engine oil cap.
2. Add oil to bring the level to the MAX level. As a guide, the distance between the marks represents 1 litre.

   Note:If the oil level goes above the MAX level, the excess oil must be removed as there is a risk of damage to the engine or to the catalytic converter.
3. Wait a few minutes for the oil to settle then check the oil level again. When the level is correct, install the oil cap and the dipstick and clean up any spilt oil.

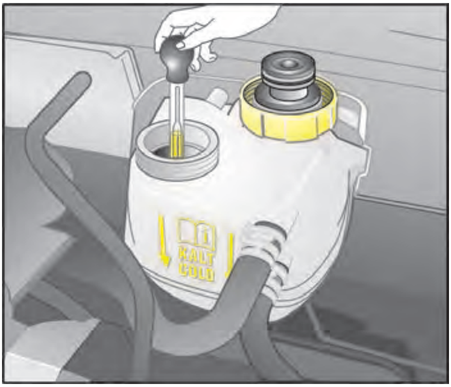


Oil consumption should not be judged until the vehicle has run several thousand kilometres. It may take this long for the oil consumption to stabilise.

WARNING:

Non-detergent and other low quality oils are specifically not recommended. The use of break-in oil, tune up compounds, friction reducing compounds and other supplemental additives is not recommended. Their use will increase costs, may be detrimental to the operation of your vehicle and may void your New Vehicle Warranty, to the extent that Holden considers the non-recommended fluid to have affected the specifications or quality of your Holden vehicle.

ENGINE COOLANT LEVEL



The level of coolant should be checked at least weekly. This is simply a matter of looking at the level in the plastic container when the engine is cold.

The level should be slightly above the KALT / COLD mark when the engine is cold. The level rises when the engine is running and drops again when the engine cools down. If the level falls below the COLD mark, the coolant should be topped up to a little over the mark.

The coolant required by your vehicle is specified in Chapter 8.

Topping up

If topping up, first mix a solution of 50% coolant and 50% water. Failure to use the coolant meeting Holden's specification or maintaining the specified concentration may result in voiding your warranty.

In an emergency, plain water may be used temporarily in the cooling system until the correct Holden coolant is obtained as soon as possible from the nearest Holden Retailer.

Note: The specified coolant contains special corrosion inhibitors for the best corrosion protection of your engine and cooling system. This coolant also gives your cooling system greater hot weather protection by increasing the boiling point and in addition provides protection in cold weather conditions down to –28°C, provided the correct concentration is maintained. It remains in the cooling system throughout the year and does not need to be changed.

If you regularly have to top up the cooling system, you should see your Holden Retailer.

WARNING:

Corrosion inhibitors and antifreeze fluids are poisonous. Use extreme care when handling. If swallowed seek medical attention. Do not remove the cooling system cap if the engine and radiator are still hot. Scalding fluid and steam can be blown out under pressure which could cause serious burns.

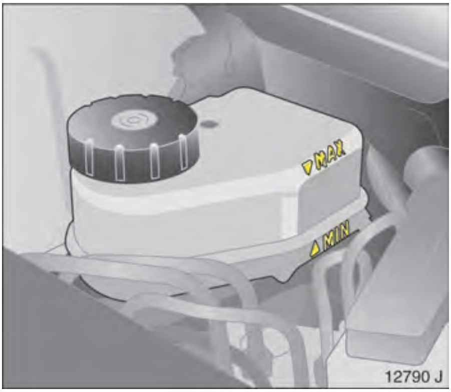
Refer to Chapter 6 if the engine overheats.

BRAKE AND POWER STEERING FLUID LEVEL

Brake fluid level

WARNING:

Brake fluid is poisonous and corrosive and will damage the paint finish of your vehicle if spilt.



The brake fluid in the master cylinder should be checked weekly. The master cylinder is located in the engine bay, on the driver's side of the vehicle.

The fluid level, visible through the plastic master cylinder reservoir, should be between the MIN and MAX level markings. If the fluid is between these levels do not remove the master cylinder cap.

Brake fluid exposed to the atmosphere quickly absorbs moisture. Moisture in brake fluid lowers the boiling point of the fluid and increases the risk of corrosion to brake components.

If you need to add fluid, use the correct brake fluid for your vehicle. Refer to Chapter 8.

Clean around the cap, add the brake fluid, secure the cap and wipe up any spilt fluid.

WARNING:

Use only new brake fluid. Use of old, used or inferior brake fluid may endanger the functioning of the brake system. Brake fluid in your vehicle must be completely replaced every two years.

If the master cylinder requires constant topping up, a malfunction may exist. Immediately have a Holden Retailer check the system.

Power steering fluid level

The fluid level for power steering will be checked for you when your vehicle is taken to your Holden Retailer for servicing. Refer to Chapter 12. The power steering fluid level does not require checking by the driver in between these scheduled services.

WASHER FLUID LEVEL AND BATTERY

Washer fluid level

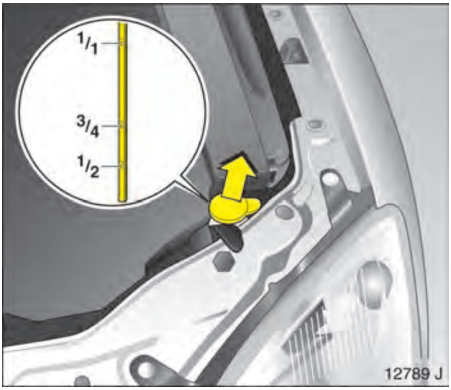
As the washer fluid is constantly used, the level should be checked weekly and topped up as required.

The washer container is located under the bonnet, on the passenger's side and supplies both the windscreen and rear (if fitted) washers.

To fill, open the flip top cap.

For a crystal clear windscreen, the correct amount of cleaner can be added. Refer to Chapter 11 for the additive recommended by your Holden Retailer. Do not use ordinary soap or detergent as these can froth up and might damage the rubber wiper blades.

Remember to secure the cap after filling.



Battery

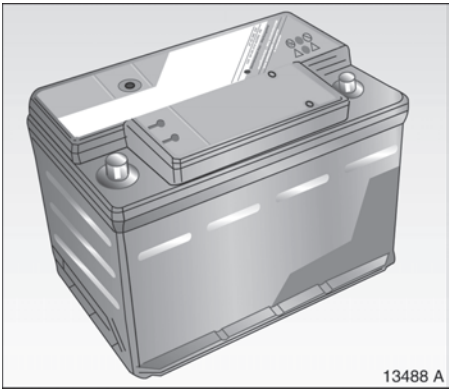
Your vehicle is fitted with a maintenance free battery, which means that the fluid level does not need to be checked.

When replacing the battery, you should always replace it with another maintenance free battery of the correct specifications. Refer to Chapter 8.

Note: Never disconnect the battery when the engine is running.

BATTERY CHARGING

Never charge the battery while it is still connected to the vehicle. If removing the battery for recharging, first disconnect the negative cable, then the positive cable.
When reconnecting the battery, first connect the positive cable to the positive post of the battery, then connect the negative cable to the negative post of the battery.



If the vehicle is not used for more than four weeks, the battery could become discharged, which could shorten the service life of the battery. To avoid this, disconnect the negative cable from the battery and only reconnect it when you are ready to use the vehicle.

Radio settings are lost when the battery is disconnected. When reconnecting the battery, you will be required to re-enter the radio security pin number.

TYRES

Air pressure

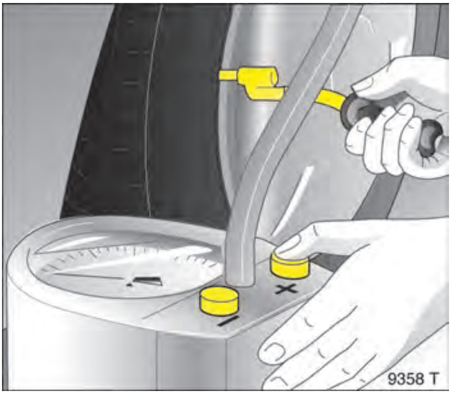
Weekly checking of the air pressure of your tyres (including the spare) ensures your safety, as well as reducing fuel consumption and increasing the life of your tyres. For constant long distance or rough road driving, daily checking is recommended.

The correct pressure for your tyres is shown on the tyre placard. For the location of the placard, refer to Chapter 8.

If the vehicle is heavily loaded the recommended pressure for the tyres is increased (refer to the tyre placard on your vehicle). As the tyres are operating under greater load the weekly air pressure check becomes even more important.

Tyre inflation pressure increases when the tyres have been driven more than 2 km. Therefore, the pressure should be checked when the tyres have been stationary for over three hours. If they must be checked immediately after driving, increase the pressure shown on the placard by 10%.

The inflation pressure in the tyres should be increased according to the load on the vehicle. Therefore, if the vehicle is loaded to half the maximum load (as shown in Chapter 10) then the tyres should be inflated half way between the minimum and maximum pressures shown on the tyre placard. Vehicles driven for prolonged periods over rough roads, particularly in outback conditions, should use the cold tyre inflation pressure on the tyre placard under maximum load conditions.



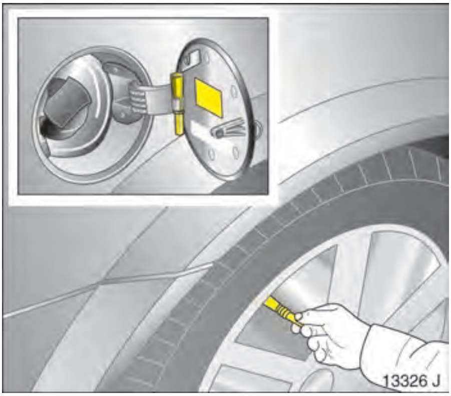
Always use a tyre pressure gauge to check the tyres; simply looking at the tyres is not sufficient.

If the pressure is too low, considerable tyre warm-up and internal damage can result, leading to tread separation and even to tyre blowout at high speeds. If the pressure is too high, reduced traction, increased risk of tyre blowout and poor tyre wear can result.

Remember to replace any valve caps or extensions, as this stops dirt and moisture from fouling the valves. When checking the tyre pressure, look at the condition of the tread and inspect the tyre for stones or abnormal wear.

If unsure, have your Holden Retailer check the tyres.

Use the valve cap tool, located on the inside of the fuel filler flap, to unscrew the valve caps more easily.



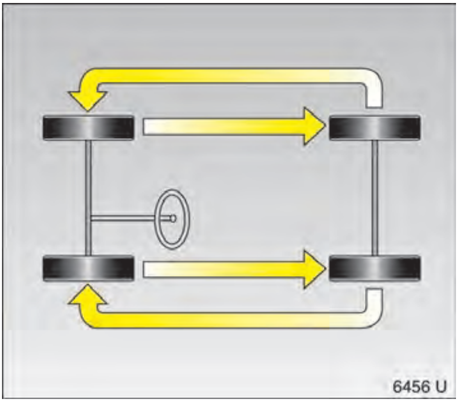
TYRES cont.

Tyre rotation

Front and rear tyres perform different jobs. They can wear differently depending on the types of roads driven, your driving habits, wheel alignment and balance, tyre pressures etc.

Tyre condition will be checked for you when you take your vehicle to be serviced by your Holden Retailer. The Retailer will be able to diagnose any unusual signs of wear.

If the tyres are rotated, it is recommended that the balance be checked at the same time.



Alignment and balance

Improper wheel alignment can cause the tyres to wear faster and unevenly. It can also cause the vehicle to 'pull' to the left or right.

Out-of-balance wheels and tyres can cause vibration and uneven tyre wear, such as cupping and flat spots.

If you suspect that either of the above problems exist, have your Holden Retailer perform a wheel alignment and balance check on your vehicle.

TYRES cont.

Replacement and repair

Replacing your factory fitted wheels and tyres with non specified wheels and tyres may affect your warranty as well as your insurance policy. Refer to the tyre placard on your vehicle for tyre size and load rating. For the location of the tyre placard, refer to Chapter 8.

Using a different size or type of tyre may affect such things as ride, handling, speedometer reading, vehicle ground clearance, tyre clearance or snow chain clearance.

Take care when using tyres with heavy treads, including tyres made for better grip in the wet. At sustained high speeds, this type of tyre will run at higher temperatures than standard tyres and should only be operated within the limits recommended by the tyre manufacturer. Any doubts about the tyres on your vehicle should be referred to your Holden Retailer.

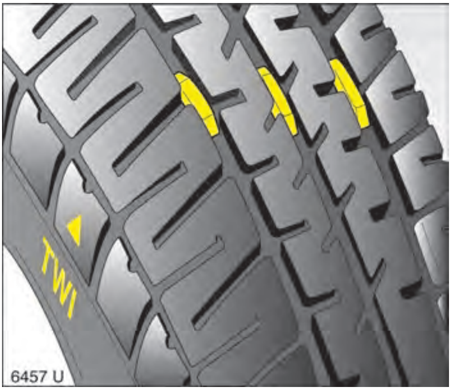
Tyres with a higher speed or load rating are acceptable, provided they are fitted to a suitable rim size.

New tyres should be fitted in pairs to the front. If replacing only one tyre, it should be paired on the same axle with the least worn of the other three.

Replace your tyres when:

- The tyres are worn to the point where the tread indicators appear, or the cord or fabric is showing.

  The tyres originally fitted to your vehicle have built-in tread indicators. When only 2 to 3 mm of tread remains, these indicators show as plain bars across the tread pattern, at regular intervals around the tyre. Their position is indicated by markings on the tyre side-wall.



- The tread or side-wall is cut, split, or cracked deep enough to expose the cord or fabric.
- The tyre has a bump or bulge in it, indicating internal tyre damage.
- The tyre has a puncture, cut or other damage which cannot be repaired due to the size or location of the damage.

Do not attempt to drive on the flat tyre more than is necessary to stop safely. Driving even a short distance can damage the tyre and wheel beyond repair. Tyres which have been repaired or retreaded cannot be driven safely at high speeds. Therefore, their use is not recommended.

Notes

CHAPTER 8

Specifications

Page
8-2 Vehicle specifications
8-4 Identifications labels

VEHICLE SPECIFICATIONS

	Z 22 SE DOHC	Z 32 SE DOHC
Engine type	2.2 litre	3.2 litre
No of cylinders	4	6
Bore	86 mm	87.5 mm
Stroke	94.6 mm	88 mm
Compression ratio	10:1	10:1
Piston displacement	2198 cc	3175 cc
Power kW @ r.p.m.	108 @ 5600 *	155 @ 6200 *
Torque Nm@ r.p.m.	203 @ 4000 *	300 @ 4000 *
Oil specification	ACEA service classication A2 or A3, viscosity grade 15W-40 or 15W-50	
Refill oil capacity (including filter)	5.0 litres	4.75 litres
Fuel tank capacity	61 litres	61 litres
Coolant capacity	7.4 litres (manual) 7.6 litres (automatic)	7.7 litres (manual) 7.9 litres (automatic)
Coolant spec	50% water and 50% extended-life anti-freeze coolant conforming to GM6277M specification	

* Based on the use of regular unleaded fuel (91 RON).

Brake fluid	Heavy duty brake fluid meeting S.A.E specification J1704, DOT 4

VEHICLE SPECIFICATIONS cont.

Transmission

	5 speed manual	**5 speed automatic**
Fluid specification	Gear oil, meeting Holden specification no. HN2354 (Castrol SMX-O or equivalent)	Automatic transmission fluid meeting Holden specification no. HN2414 (ESSO JWS 3309)
Capacity	1.85 litres approx.	4 litres approx.

Dimensions (mm)

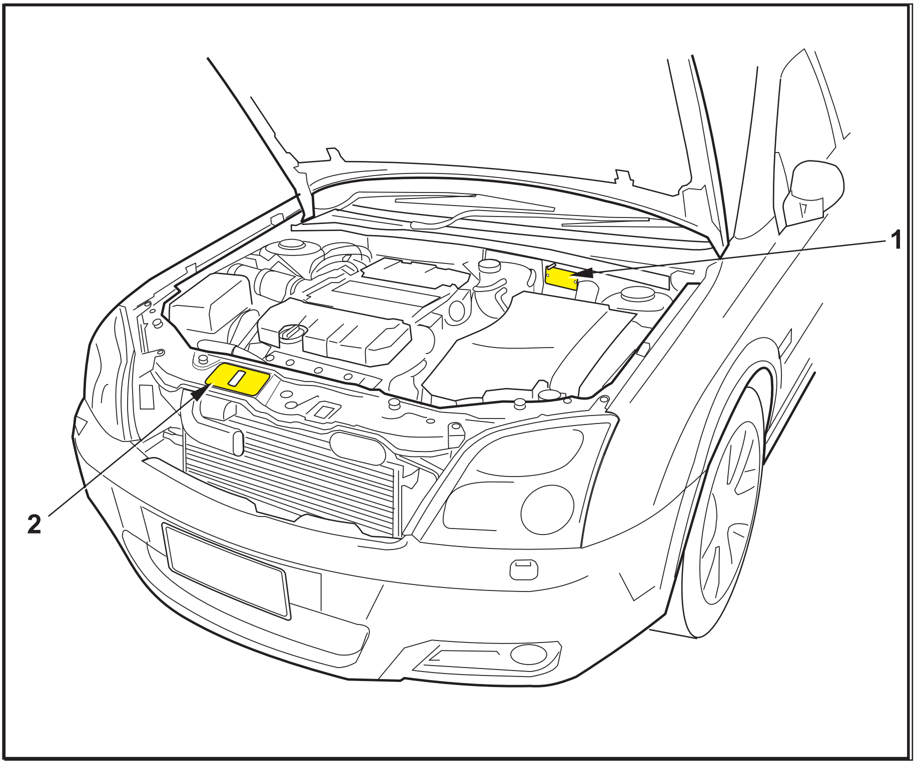
	CD Sedan	**CD Hatch**	**CDX Hatch**	**CDXi Hatch**
Overall length	4596			
Overall height	1460			
Overall width (inc. mirrors)	1798			
Wheelbase	2700			
Front track *	1525			
Rear track *	1514			1517
Ground clearance *	109	109 (Z 22 SE) 111 (Z 32 SE)		

* (with standard tyres)

Battery

Volts	12
Amps	66 amp / hours

IDENTIFICATION LABELS



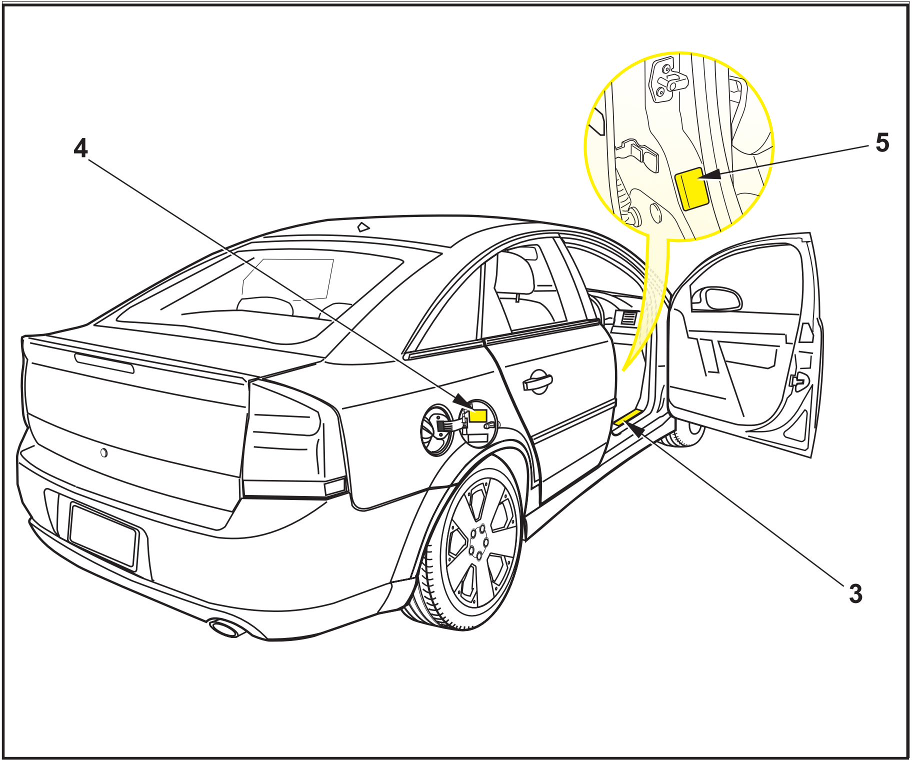
1 Compliance plate

The plate shows the vehicle approval number, category code, make, model and seating capacity. Also shown on this plate is the ISOVIN number, which should be used for identification with spare parts. Refer to page 6 of this chapter for the breakdown of the ISOVIN number.

2 Holden identification plate (if fitted)

The Holden number on the Holden identification plate is used for warranty identification and Roadside Assistance identification.

IDENTIFICATION LABELS cont.



3 Vehicle identification number stamp

This stamp shows the ISOVIN number, which should be used for identification with spare parts. Refer to the following page for a breakdown of the ISOVIN number. The number is also stamped onto the sill inner panel, under a cover.

4 Fuel label

Refer to Chapter 5 for the type of unleaded fuel recommended for use.

5 Tyre placard

The tyre placard shows the recommended tyre pressures. Refer to Chapter 7 for information about tyre pressures.

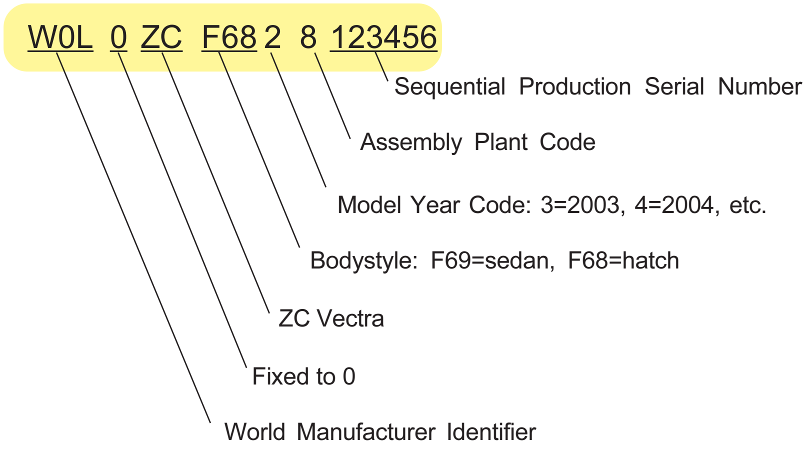
IDENTIFICATION LABELS cont.

Vehicle identification number (ISOVIN)

The individual ISOVIN (example below) appears on the Safety Compliance Plate. This number is used for identification of parts. This identification number appears on:

- the Compliance plate
- the Option Code plate (if fitted)
- the Vehicle Identification number stamp
- the Vehicle Identification number label.

Example ISOVIN


W0L 0 ZC F68 2 8 123456
Sequential Production Serial Number
Assembly Plant Code
Model Year Code: 3=2003, 4=2004, etc.
Bodystyle: F69=sedan, F68=hatch
ZC Vectra
Fixed to 0
World Manufacturer Identifier

Notes

CHAPTER

9

After Sales

Page

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9-4 Parts and Accessories Warranty
9-5 Warranty questions and answers
9-8 Roadside Assistance
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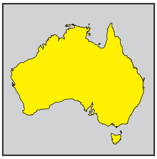
Note: The names and details of Retail Premises may change after the printing of this Handbook. The list contains both Authorised Holden Retailers and Authorised Holden Service Operations.

NEW VEHICLE WARRANTY CERTIFICATE

New Vehicle Warranty application

This Warranty is given by Holden Ltd, ABN 84 006 893 232, ('Holden'). The Warranty applies to the vehicle identified on the inside front cover of this Owner's Handbook. It is provided to the original and subsequent owners / operators driving the vehicle within Australia during the Warranty Period. This Warranty is given in addition to all rights conferred by law on that person.



Australian vehicles

This Warranty is only applicable to vehicles purchased and operated in Australia.

Owners of vehicles purchased in Australia but operated overseas should consult the local retailer in the country of operation about any Warranty applicable to their vehicle. This Warranty does not apply for Holden vehicles exported overseas. Similarly, this Warranty is not provided for vehicles purchased overseas and imported into Australia.

Repairs covered

Subject to the exclusions shown on the following page, this Warranty covers the correction, during the Warranty Period, of any vehicle defect related to materials or workmanship and advised to a Holden Retailer or Authorised Service Outlet, by repair or at Holden's option by replacement.

100,000kms
3
years

Warranty Period

The coverage commences from the date of delivery (or in the case of a demonstrator vehicle the date when the vehicle was first placed into service by the Retailer). The coverage expires at the end of the period of 3 years after the commencement date or after the vehicle has travelled 100 000 kilometres, whichever occurs first.

No charge

Warranty work undertaken (including parts and labour) will be carried out at no cost to the vehicle owner. However, this work should not be confused with servicing specified in the Maintenance Schedule in Chapter 12 of this Owner's Handbook for which a charge is payable.

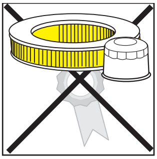
NEW VEHICLE WARRANTY CERTIFICATE cont.

Warranty exclusions

- **Damage**

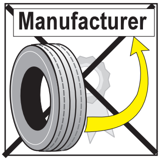
Your Warranty does not extend to the following damage: Damage caused by an accident, fire, theft or moving objects striking the vehicle.

Damage caused by industrial fallout, chemicals or sealants. Damage caused by atmospheric fallout or flood, hail, salt, etc.



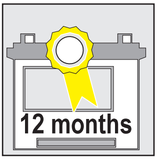
- **Maintenance items**

Services such as, brake adjustment, replacement of filters, wiper rubbers etc, which are required as part of normal vehicle maintenance, refer Chapter 12.



- **Tyres**

The tyres (and tubes where applicable) fitted to your vehicle are not covered by this Warranty. However, they may be covered by the tyre manufacturer.



- **Batteries**

Batteries are warranted for 12 months.

- **Misuse**

The warranty does not cover damage caused by:

(a) misuse or abuse of the vehicle such as by racing, rallying, overloading, etc., or neglect,

(b) operation of the vehicle after the defect is known,

(c) failure to carry out proper maintenance services,

(d) use of incorrect types and grades of fuel, oil or lubricants,

(e) alteration of the vehicle by anyone not authorised by Holden,

(f) fitting of parts or accessories not recommended by Holden,

(g) any work carried out on the vehicle by anyone except a Holden Retailer or authorised Service Outlet.

PARTS AND ACCESSORIES WARRANTY

Holden warrants Holden approved Parts and Accessories ('Parts' and 'Accessories') for the periods and on the conditions set out below. The Warranty covers the correction, during the relevant Warranty Period, of defects in any such Parts and Accessories, by repair or at Holden's option by replacement.

- **Accessories installed to the new vehicle**

  Holden approved Accessories installed by a Holden Retailer or authorised Service Outlet to the new vehicle at the time of purchase are covered together with the New Vehicle warranty for the period of 3 years or 100 000 km, whichever occurs first.

- **Parts and Accessories installed after new vehicle delivery by a Holden Retailer or authorised Service Outlet**

  Parts and Accessories are covered for 2 years or 50 000 km (whichever occurs first). If the vehicle is still within the New Vehicle Warranty the Parts and Accessories are covered by the longer of:

  2 years / 50 000 km (whichever occurs first)

  or

  the end of the New Vehicle Warranty.

  As an example, an Accessory installed in a 7 month old vehicle would be covered until the end of the New Vehicle Warranty; an Accessory installed in a 2½ year old vehicle would be covered until the end of 4½ years or a further 50 000 km from when the Accessory was installed.

- **Purchased at retail or trade**
  Parts and Accessories purchased at trade or retail and installed by other than a Holden Retailer or authorised Service Outlet are warranted for 1 year from the date of purchase. Please keep a receipt to support warranty claims.

  The Warranty does not cover the labour costs of removal / reinstallation of Parts and Accessories when installed or rectified by other than a Holden Retailer or authorised Service Outlet.

- **Parts and accessories warranty exclusions**

  The tyres (and tubes where applicable) are not covered by this warranty. However, they may be covered by the tyre manufacturer.

  Batteries are warranted for 12 months from date of purchase.

  Parts which are required as part of normal vehicle maintenance are warranted against manufacturing defect at the time of installation. Consult your Holden Retailer to confirm the period of this warranty.

WARRANTY QUESTIONS AND ANSWERS

This section is designed to assist you in understanding the Holden Warranty provided with your new vehicle.

The following are some of the most frequently asked questions, for which detailed answers are provided.

Q 1. How do I go about obtaining Holden Warranty service?

It is the responsibility of the Holden Selling Retailer to provide Holden Warranty service, therefore you should take your vehicle to the Holden Selling Retailer whenever Holden Warranty service is needed. However, if this is not possible, you may go to any other Authorised Holden Retailer. The details recorded inside the front cover of this handbook will be required by the Holden Retailer.

Q 2. What should I do if my vehicle becomes unsafe or inoperative as a result of a defect which is covered by the Holden New Vehicle Warranty?

You should contact the nearest Authorised Holden Retailer or Holden Customer Assistance Service (refer further in this chapter) as soon as possible, and arrange for that Retailer to carry out the required Holden Warranty Service.

Q 3. What should I do if, in an emergency, Holden Warranty service is required and an Authorised Holden Retailer is not available to provide such service at the time?

If, in an emergency, a repair, replacement or adjustment (covered by the Holden New Vehicle Warranty) is required to enable your vehicle to be operated safely and it is not practical for you to go to an Authorised Holden Retailer, the service (to the extent that it is necessary to enable your vehicle to be operated safely) may be performed by any other qualified mechanic or repairer. A claim for the reasonable cost may be made through the Authorised Holden Retailer who would normally provide you with Holden Warranty Service. You must also take your vehicle to the Authorised Holden Retailer for inspection of the service and / or completion of any required Holden Warranty service, as soon as possible.

Note: During normal business hours you should seek authorisation from your nearest Authorised Holden Retailer or Holden Customer Assistance Service, prior to repairs being commenced.

Q 4. Are damage or injury, loss of time, inconvenience, commercial or other direct or indirect loss covered by the Holden Warranty?

No, these items are not covered. Holden warranty only covers the repair, replacement or adjustment of those parts of your vehicle which are found to be defective in materials or workmanship. No other types of claim for compensation of any kind, even if the same resulted from a consequence of a defect in materials or workmanship in your vehicle, will be recognised under the Holden New Vehicle Warranty.

You may have rights under the law to claim compensation outside of the Holden New Vehicle Warranty, but any claim based on those rights should be separately pursued.

WARRANTY QUESTIONS AND ANSWERS cont.

Q 5. Will I have to pay for maintenance costs during the Warranty Period?

Maintenance costs are not covered by the Holden New Vehicle Warranty. The Maintenance Schedule in Chapter 12 specifies the minimum maintenance required for your vehicle operating under normal conditions.

The maintenance items (except where required as a result of defects in materials or workmanship) for which you will have to pay include:

- Engine tune-up, including spark plugs replacement.
- Replacement of all filters, engine and other belts, hoses, wiper blades, clutch linings.
- Cleaning or flushing of fuel, coolant, brake, engine, transmission, differential, power steering etc., after 1500 km.
- Carbon and sludge removal.
- Maintenance servicing of emission control system devices.
- Adding to (or replacing) lubricants.
- Adding to (or replacing) air conditioning refrigerant, after 1500 km.
- Any necessary adjustments to drive belts, transmissions, clutch, park brake etc.
- Wheel balancing – after 5000 km.
- Wheel alignment.
- De-dusting or de-glazing of brake linings or pads – after 1500 km.
- Brake lining wear or damage.
- Brake disc pad or disc wear.
- Battery recharging.
- Paint, bright metal finish and trim, due to normal deterioration.
- Body panel adjustment – after 1500 km.
- Door, or bonnet lock adjustments.
- Glass or channel adjustments – after 1500 km.
- Body rattle, squeaks and general tightening of bolts, fasteners and fittings – after 1500 km.
- Chipped glass or breakage.
- Torn or damaged floor mats or carpets.
- Normal wear and tear to trim components.

Q 6. Are my tyres covered by the Holden New Vehicle Warranty?

No. The tyres fitted to your vehicle are covered by a separate warranty provided by the tyre manufacturer. Any Authorised Holden Retailer will assist you by discussing any queries which you might have with respect to the tyre manufacturer's warranty with the tyre manufacturer's representative.

WARRANTY QUESTIONS AND ANSWERS cont.

Q 7. Will I have to pay for any costs or expenses in connection with the provision of Holden Warranty service?

All parts and labour used in carrying out Holden Warranty service at the premises of the servicing Holden Retailer are free of charge. Whenever Holden Warranty service is to be carried out by the servicing Holden Retailer it is your responsibility to deliver your vehicle to the servicing Holden Retailer's premises.

If, as a result of a defect which is covered by the Holden New Vehicle Warranty, your vehicle cannot be driven safely and you arrange for the nearest Authorised Holden Retailer to carry out the required Holden Warranty service, Holden will accept reasonable towing costs to move your vehicle to the nearest Holden Retailer's premises. Before employing a towing company, contact the nearest Holden Retailer and / or Holden Customer Assistance Service (refer page 10 of this chapter) to obtain guidance.

Q 8. Would my vehicle's engine benefit from fuel additives, oil additives or coolant additives not marketed by Holden?

The use of break-in oil, tune-up compounds, friction-reducing compounds and other supplemental additives is not recommended; their use will not only increase operating costs, but may also be detrimental to the operation of your vehicle and may affect the validity of your New Vehicle Warranty.

Only the fluids and lubricants referred to in this handbook should be used.

UNAUTHORISED STATEMENTS IN RELATION TO HOLDEN PRODUCTS

No Holden Retailer or other person is authorised or permitted to give or make any statement, assertion or undertaking in relation to the quality, performance, characteristics, descriptions or fitness for any purpose of any Holden product or in connection with the supply of any Holden product, which is at variance with any written statement, assertion or undertaking on any of these subjects given or made by Holden in its published sales literature, and Holden does not accept responsibility for any such unauthorised action.

ROADSIDE ASSISTANCE

3 YEAR
24 HOUR ROADSIDE ASSISTANCE

Our commitment to your satisfaction

Holden's Roadside Assistance is part of the unequalled commitment by Holden to provide total motoring satisfaction.

From the moment delivery is made, our aim is to provide the finest possible ownership experience, from design through manufacturing to servicing and now beyond to the open road, Australia wide.

We hope the need never arises, but if it does, we'll be there to help through Holden Roadside Assistance.

How does Holden Roadside Assistance work?

Holden Roadside Assistance is provided by Holden Ltd and delivered by the collective resources of the Australian Automobile Clubs and Associations including the constituents of Assist Australia (AA).

Which vehicles are covered by the service?

As of 1st November 1993 all new Holden passenger and light commercial vehicles are covered for 36 months from the date of first registration.

Holden Roadside Assistance is extended to private and business vehicles, taxis, rental companies, all government and fleet operators.

What will Holden Roadside Assistance do for me?

Holden Roadside Assistance is designed to get you mobile on any road that is trafficable to normal two wheel drive vehicles. In the event of the unexpected happening, from your keys being locked in your vehicle to mechanical and accident advice, help is readily available by simply calling the toll free number 1800 817 100.

All Holden luxury vehicles receive the added benefits of Holden Roadside **Ultra** Assist which includes accommodation, alternative transport, rental vehicle, assistance in case of accident, theft and medical emergency and Australia wide vehicle recovery.

Can I upgrade to Roadside Ultra Assistance?

Yes, owners can upgrade to Holden Roadside **Ultra** Assistance for a fee by dialling 1800 645 668. To request a copy of the Ultra terms and conditions, contact the toll free Customer Assistance Service Line on 1800 033 349.

ROADSIDE ASSISTANCE cont.

When do the benefits begin?

Cover begins from the date of first registration. An interim card entitles you to immediately receive all the benefits of Holden Roadside Assistance.

Where can I get Roadside Assistance?

Holden Roadside Assistance is available to you at home, or at the roadside, anywhere in Australia, should you need it. In remote or sparsely populated areas you may experience delays in obtaining Roadside Assistance due to your location, the availability of the service provider and accessibility.

Is there a membership or joining fee?

No, Holden Roadside Assistance is complimentary with every new Holden passenger vehicle and light commercial vehicle for 36 months from the date of first registration.

What will Holden Roadside Assistance cost me?

Materials, fuel and spare parts must be paid for at the time of service. The service personnel attending will issue a receipt for these expenses. Reimbursement of expenses covered by Holden's warranty can be claimed by contacting your local Holden Retailer.

What happens if I sell my vehicle?

Holden Roadside Assistance stays with the vehicle, so if you sell your vehicle during the 36 month period, it is still eligible for the balance of the Holden Roadside Assistance. The new owner simply registers for the service by using the change of ownership form supplied in the Roadside Assistance booklet.

How do I call for assistance?

Simply call Holden Roadside Assistance toll free on 1800 817 100 from anywhere in Australia. For further information regarding the service and full terms and conditions, refer to the Roadside Assistance Kit in the glovebox or call the toll free Customer Assistance Service Line on 1800 033 349.

CUSTOMER ASSISTANCE

We want you to be happy with your new vehicle, together with the people you deal with while you have the vehicle.

Normally, any problems with the sales, operation, servicing or the validity of original equipment supplied with your vehicle will be handled by your Holden Retailer's Sales and Service Department.

We realize however, that, with the best intentions, misunderstandings do occur sometimes.

☞ Therefore, we suggest you discuss any concern with one of the Holden Retailer's management people. If you haven't received satisfaction from the Sales Manager or Service Manager – go to the General Manager or to the Retailer Principal.

By now you should have satisfaction. If not, the Holden Customer Assistance office is at your disposal.

☎ The Australian Holden Customer Assistance representatives can be telephoned from anywhere within Australia for only the cost of a local call. The Melbourne area number is **9646 5466**. Outside the Melbourne Metropolitan area, the number is **1800 03 3349**.

If your concern relates to parts / accessories and you have made contact with the Retailer or Distributor without satisfaction, you may contact Holden Service Parts Operations on (03) 9797 7341.

Naturally, telephoning is the quickest and the best way to contact. However, if you prefer to write the address is:

✉ The Manager

Holden Customer Assistance Centre

GPO Box 1714

Melbourne, 3001.

Your letter should clearly outline your concern or query, and include the following:

✍
- Your name and address
- Telephone numbers, both private and business
- Servicing Retailer Premises name and address
- Vehicle model
- Vehicle identification number (I.S.O.V.I.N.), refer to the inside front cover of this Handbook.
- Date of purchase
- Current odometer reading

Most of this information can be found on the Vehicle Identification Certificate, located inside the front cover of this Handbook.

Before you write however, remember that the telephone is the quicker and more efficient means of communication.

FOR NEW ZEALAND HOLDEN OWNERS

The information in this Owner's Handbook applies primarily to Australian Holden vehicles and there may be some differences to the Warranty and Owner Assistance provisions for New Zealand. Applicable details for New Zealand are set out in the Holden Warranty and Owner Assistance Information booklet enclosed in the New Zealand glovebox wallet.

For your convenience, a list of New Zealand Retailers is provided at the end of this Chapter.

☎ New Zealand Assistance can be reached on:

0800 HOLDEN (0800 465336)

This number provides access to New Zealand Roadside Assistance as well as New Zealand Customer Assistance.

✉ If you prefer to write, the address is:

The Manager
Holden Customer Assistance Centre
GPO Box 1714
Melbourne
Australia 3001

AUSTRALIAN HOLDEN DEALERS

N.S.W. Metropolitan

ARNCLIFFE
Suttons Motors Arncliffe P/L
93 Princes Highway
P: (02) 9335 9000 FAX: (02) 9335 9006

ASHFIELD
Muirs Holden
252 Parramatta Road
P: (02) 9798 8888 Fax: (02) 9799 7010

BALGOWLAH
Peninsula Holden Balgowlah
164 Condamine Street
P: (02) 9949 1888 FAX (02) 9949 7237

BANKSTOWN
Peninsula Holden Bankstown
466 Chapel Road
P: (02) 9790 1234 Fax: (02) 9790 0033

BLACKTOWN
Heartland Holden
120~128 Sunnyholt Road
P: (02) 8811 0800 Fax: (02) 9672 8377

CAMDEN
Paul Wakeling Holden-Camden
33 Edward Street
P: (02) 4655 5000 Fax: (02) 4655 5001

CAMPBELLTOWN
Paul Wakeling Holden
Cnr Blaxland & Mill Roads
P: (02) 4628 1444 Fax: (02) 4628 3262

CASTLE HILL
Heartland Holden
Cnr Victoria Ave/Windsor Rd
P: (02) 9894 6666 Fax: (02) 9894 5600

CHATSWOOD
Sundell Holden
Cnr Smith and Gibbes Street
P: (02) 9417 8431 Fax: (02) 9497 7552

CHULLORA
Suttons Motors (Chullora) P/L
Cnr Hume Hwy/Waterloo Rd
P: (02) 9642 0233 Fax: (02) 9642 7798

DEE WHY
Peninsula Holden Dee Why
Cnr May & Mooramba Roads
P: (02) 9982 1311 Fax: (02) 9982 3755

EASTSYDNEY
Suttons City Holden
137-157 Bourke Street
P: (02) 9357 4222 Fax: (02) 9358 5542

FAULCONBRIDGE,BLUEMOUNTAINS
Blue Mountains Holden
435~437 Great Western Hwy
P: (02) 4751 1911 Fax: (02) 4751 2481

HOMEBUSH
Suttons Motors Homebush P/L
112 Parramatta Road
P: (02) 9746 4500 Fax: (02) 9746 7206

LAKEMBA
United Holden Lakemba
817 Canterbury Road
P: (02) 9740 5555 Fax: (02) 9740 5907

LANSVALE
Lansvale Holden
266~284 Hume Highway
P: (02) 9728 7333 Fax: (02) 9726 1085

LIVERPOOL
McGrath Holden
411~419 Hume Highway
P: (02) 9821 5000 Fax: (02) 9821 1993

PARRAMATTA
Heartland Holden
65 Church Street
P: (02) 9204 6666 Fax: (02) 9635 6346

PENNANT HILLS
Barry Smith Holden
343~355 Pennant Hills Road
P: (02) 9483 3333 Fax: (02) 9484 7475

PENRITH
Heartland Holden
Cnr Henry St & Evan Street
P: (02) 4732 1966 Fax: (02) 4721 5896

ROCKDALE
United Holden Rockdale
591 Princes Hwy
P: (02) 9567 0400 Fax: (02) 9597 0410

ROSEBERY
Suttons City Holden
Link Road
P: (02) 9931 3000 Fax: (02) 9931 3001

RYDE
Hunter Holden
603~619 Victoria Road
P: (02) 9808 9123 Fax: (02) 9809 6592

AUSTRALIAN HOLDEN DEALERS CONT.

ST LEONARDS
Hunter Holden
4 Herbert Street
P: (02) 9906 4044 Fax: (02) 9439 4635

ST. MARY'S
Heartland Holden
Cnr Glossop & Harris Streets
P: (02) 9673 2111 Fax: (02) 9673 4932

SUTHERLAND
McGrath Holden Sutherland
499~505 Princes Highway
P: (02) 9545 4811 Fax: (02) 9545 2533

WAITARA
Suttons Motors Waitara P/L
90 Pacific Hwy
P: (02) 9487 2222 Fax: (02) 9489 0009

WINDSOR
Hawkesbury Valley Holden
18 Macquarie Street
P: (02) 4577 4077 Fax: (02) 4577 2592

N.S.W. Country

ARMIDALE
Graham Betts Holden
103 Rusden Street
P: (02) 6772 9444 Fax: (02) 6772 5836

BALLINA
Quayside Motors
Cnr Ronan Place & Pacific Hwy
P: (02) 6686 5111 Fax: (02) 6686 8574

BATEMANS BAY
Surfair Holden
30-32 Orient Street
P: (02) 4472 5111

BATHURST
Bathurst Holden
Mitchell Highway
P: (02) 6331 2077 Fax: (02) 6331 9177

BEGA
Bega Valley Holden
Cnr Upper and Gibbs Sts
P: (02) 6492 2333 Fax: (02) 6492 3105

BLAYNEY
Blayney Holden
98 Adelaide Street
P: (02) 6368 2745 Fax: (02) 6368 3257

BOMBALA
Delcott Engineering Pty Ltd
Maybe Street
P: (02) 6458 3341 Fax: (02) 6458 3940

BOOROWA
Boowowa Auto Repairs
40 Marsden Street
P: (02) 6385 3305

BROKEN HILL
Donlee Motors Pty Ltd
Cnr Galena & Rakow Streets
P: (08) 8087 2463 Fax: (08) 8087 7971

CARDIFF
Kelly Holden
35~39 MacQuarie Road
P: (02) 4954 7733 Fax: (02) 4954 9407

CESSNOCK
Geoff Boyd Holden
240~246 Maitland Road
P: (02) 4990 0555 Fax: (02) 4990 0575

COBAR
Cobar Holden
Cnr Lewis St & Louth Road
P: (02) 6836 4005 Fax: (02) 6836 3409

COFF'S HARBOUR
Geoff King Holden
Cnr Pacific Hwy and Thompson Road
P: (02) 6652 2288 Fax: (02) 6652 5360

COOMA
High Country Holden
66~70 Sharp Street
P: (02) 6452 1077 Fax: (02) 6452 1142

COONABARABRAN
Coonabarabran Holden
24 Charles Street
P: (02) 6842 1499 Fax: (02) 6842 2473

COONAMBLE
Moody's Motors
37 Aberford Street
P: (02) 6822 1161 Fax: (02) 6822 1624

COOTAMUNDRA
Jenkins Garage
111 Wallendoon Street
P: (02) 6942 2522 Fax: (02) 6942 1493

AUSTRALIAN HOLDEN DEALERS cont.

COWRA
Waugoola Motors Pty Ltd
Kendal Street
P: (02) 6342 1800 Fax: (02) 6342 3614

CROOKWELL
Crookwell Autos
114 Goulburn Street
P: (02) 4832 1433 Fax: (02) 4832 2157

DENILIQUIN
Burchfield Bros & Co
112~114 End Street
P: (03) 5881 2133 Fax: (03) 5881 3322

DORRIGO
Phil Noble Motors
46~48 Hickory Street
P: (02) 6657 2017 Fax: (02) 6657 2217

DUBBO
Golden West Holden
54 Bourke Street
P: (02) 6882 1011 Fax: (02) 6882 7102

DUNGOG
Turner Holden
248 Dowling Street
P: (02) 4992 1816 Fax: (02) 4992 1833

EDEN
Ron Doyle
113 Princes Highway
P: (02) 6496 1420 Fax: (02) 6496 1467

FINLEY
Riverina Holden
104 Murray Street
P: (03) 5883 1211 Fax: (03) 5883 1638

FORBES
Frank Spice Holden
20~22 Dowling Street
P: (02) 6851 1755 Fax: (02) 6852 2825

GATESHEAD
Brian Kelly Holden
39 Pacific Highway
P: (02) 4920 7000 Fax: (02) 4920 8008

GILGANDRA
Gilgandra Holden
3 Morris Street
P: (02) 6847 1888 Fax: (02) 6847 1277

GLEN INNES
Glen Severn Holden
167 Grey Street
P: (02) 6732 2888 Fax: (02) 6732 3394

GOSFORD
Barry Robertson Holden
Pacific Highway
P: (02) 4325 0511 Fax: (02) 4324 1043

GOULBURN
Geissler Motors
279~298 Auburn Street
P: (02) 4821 3744 Fax: (02) 4821 9798

GRAFTON
Ken Casson Holden
37~39 Turf Street
P: (02) 6642 6666 Fax: (02) 6642 6737

GRENFELL
Peter Mellon Motors
40 Alexandra Street
P: (02) 6343 1522 Fax: (02) 6343 1347

GRIFFITH
Leo Franco Holden
164~166 Yambil Street
P: (02) 6964 2977 Fax: (02) 6962 4916

GUNNEDAH
Namoi Valley Motors
48 Barber Street
P: (02) 6742 0211 Fax: (02) 6742 3842

HARDEN
Ginty & O'Leary
Cnr Station & Albury Streets
P: (02) 6386 2320 Fax: (02) 6386 2722

HAY
Royce Curtis Motors
168 Lachlan Street
P: (02) 6993 1503 Fax: (02) 6993 2212

HOLBROOK
Lieschke Motors Pty Ltd
78 Albury Street
P: (02) 6036 2244 Fax: (02) 6036 2831

INVERELL
Gaukroger Sales Pty Ltd
Vivian Street
P: (02) 6722 2722 Fax: (02) 6722 1804

KANDOS
Chrisfield Holden
11 Angus Street
P: (02) 6379 4204 Fax: (02) 6379 4606

KEMPSEY
Thoroughgood Holden
118~132 Belgrave Street
P: (02) 6562 1381 Fax: (02) 6562 1383

AUSTRALIAN HOLDEN DEALERS cont.

KIAMA
Glen Fulton Holden
35~41 Collins Street
P: (02) 4232 1888 Fax: (02) 4232 3062

KYOGLE
O & H Holden
128~134 Summerland Way
P: (02) 6632 1711 Fax: (02) 6632 2552

LEETON
John Ryan Holden
47~51 Pine Avenue
P: (02) 6953 2466 Fax: (02) 6953 6725

LISMORE
Crampton Automotive Pty Ltd
Ballina Road
P: (02) 6621 1888 Fax: (02) 6622 4659

LITHGOW
Lithgow City Holden
255 Main Street
P: (02) 6351 4555 Fax: (02) 6351 4653

MACKSVILLE
Eastland Holden
18~22 Cooper Street
P: (02) 6568 1711 Fax: (02) 6568 1816

MACLEAN
O'Halloran Motors
175 River Street
P: (02) 6645 2844 Fax: (02) 6645 4003

MAITLAND
Heritage Holden
Cnr New England Hwy & Bungaree St
P: (02) 4932 0779 Fax: (02) 4932 0473

MOREE
Keith Haddad Holden
Cnr Boston & Heber Streets
P: (02) 6752 1855 Fax: (02) 6752 1298

MORUYA
Surfair Holden
88 Vulcan Street
P: (02) 4474 2555 Fax: (02) 4474 2129

MOSS VALE
Moss Vale Holden
160~162 Argyle Street
P: (02) 4868 1055 Fax: (02) 4868 3330

MULLUMBIMBY
Tony Carsburg Holden
2 Argyle Street
P: (02) 6684 2066 Fax: (02) 6684 4593

MUDGEE
Ross Granata Motors
32 Sydney Road
P: (02) 6372 1766 Fax: (02) 6372 3735

MURWILLUMBAH
Tweed Motors
29 Prospero Street
P: (02) 6672 4444 Fax: (02) 6672 5811

MUSWELLBROOK
Upper Hunter Motors Pty Ltd
116 Bridge Street
P: (02) 6543 2577 Fax: (02) 6543 2565

NARRABRI
Allan Cooper Holden
181 Maitland Street
P: (02) 6792 3488 Fax: (02) 6792 4750

NEWCASTLE
Newcastle City Holden
King Street (Cnr Stewart Ave)
P: (02) 4961 5301 Fax: (02) 4961 6485

NOWRA
Glendon Motors Holden
301~313 Princes Highway
P: (02) 4421 0144 Fax: (02) 4423 0854

NYNGAN
New Bridge Service Centre
36 Numagee Street
P: (02) 6832 1761 Fax: (02) 6832 2760

ORANGE
Canobolas Holden
Cnr Summer St & Endsleigh Ave
P: (02) 6362 0155 Fax: (02) 6361 3702

PARKES
Broderick Motors Holden
Cnr Mitchell & Clarinda Sts
P: (02) 6862 2266 Fax: (02) 6862 1406

PORT MACQUARIE
Bob Todd Motors Pty Ltd
115 Gordon Street
P: (02) 6583 1100 Fax: (02) 6584 9508

QUIRINDI
Browning Motors
82 Henry Street
P: (02) 6746 1666 Fax: (02) 6746 1422

AUSTRALIAN HOLDEN DEALERS cont.

SCONE
Upper Hunter Motors (Scone)
100 Liverpool Street
P: (02) 6545 1355

SINGLETON
Lancaster Holden
80 John Street
P: (02) 6578 8700 Fax: (02) 6578 8733

TAMWORTH
Kensell's Holden
Cnr Bourke St & Kable Ave
P: (02) 6766 6699 Fax: (02) 6766 7339

TAREE
Cullen Holden
21~25 Victoria Street
P: (02) 6552 2222 Fax: (02) 6552 1269

TEMORA
Rod Lovering Holden
607-608 Stockinbingal Road
P: (02) 6977 2255 Fax: (02) 6977 2033

TENTERFIELD
Sexton & Green (Sales & Service) P/L
148 Rouse Street
P: (02) 6736 1855 Fax: (02) 6736 1946

TUGGERAH
Barry Robertson Holden
172 Pacific Highway
P: (02) 4351 2588 Fax: (02) 4352 1759

TUMUT
Harry Kell & Sons Pty. Ltd
Cnr. Merrivale & Russell Streets
P: (02) 6947 2293 Fax: (02) 6947 3763

TUMUT
Holden Tumut Service Centre
52 Adelong Road
P: (02) 6947 6374 Fax: (02) 6947 6314

TUNCURRY
Great Lakes Holden
144 Manning Street
P: (02) 6555 6644 Fax: (02) 6555 7433

ULLADULLA
Alan May Holden
169 Princes Highway
P: (02) 4455 1166 Fax: (02) 4455 4122

WAGGAWAGGA
Wagga Motors Pty Ltd
32 Dobney Avenue
P: (02) 6925 3411 Fax: (02) 6925 3283

WALCHA
Bowdens Holden Walcha
18 Derby Street
P: (02) 6777 2226 Fax: (02) 6777 2319

WALGETT
Walgett Garage Pty Ltd
81 Wee Waa Street
P: (02) 6828 1088 Fax: (02) 6828 1198

WALLA WALLA
D.E. Lieschke & Son Pty Ltd
63 Commercial Road
P: (02) 6029 2202 Fax: (02) 6029 2134

WARIALDA
Roger Moore
Hope Street
P: (02) 6729 1570 Fax: (02) 6729 1104

WARILLA
Wilson’s Holden
29 Shellharbour Road
P: (02) 4295 1223 Fax: (02) 4296 1007

WARREN
Fuller Bros
Dubbo Street
P: (02) 6847 4978 Fax: (02) 6847 4477

WELLINGTON
Gersbach’s Garage Pty Ltd
92 Lee Street
P: (02) 6845 2733 Fax: (02) 6845 3236

WEST WYALONG
West Wyalong Motors
183 Main Street
P: (02) 6972 2388 Fax: (02) 6972 2570

WOLLONGONG
Dwyers City Holden
31~33 Crown Street
P: (02) 4229 9222 Fax: (02) 4229 5105

YOUNG
Harden & Geelan Holden
30 Boorowa Street
P: (02) 6382 1155 Fax: (02) 6382 4673

AUSTRALIAN HOLDEN DEALERS cont.

A.C.T.

BELCONNEN
Gerald Slaven Holden
2 Josephson Street
P: (02) 6251 5111 Fax: (02) 6253 1298

BRADDON
Rolfe Holden
44 Mort Street
P: (02) 6248 7888 Fax: (02) 6257 1328

PHILLIP
Commonwealth Motors Pty Ltd
158 Melrose Drive
P: (02) 6282 3522 Fax: (02) 6282 5214

Tas.

BURNIE
Motors Burnie
Marine Terrace
P: (03) 6431 1122 Fax: (03) 6431 3146

DEVONPORT
Motors Devonport
Victoria Parade
P: (03) 6424 4033 Fax: (03) 6424 5249

HOBART
Motors Pty Ltd
179 MacQuarie Street
P: (03) 6230 7307 Fax: (03) 6230 7380

LAUNCESTON
Motors Launceston
93~95 Elizabeth Street
P: (03) 6332 9101 Fax: (03) 6334 5245

Vic. Metropolitan

BACCHUS MARCH
Alan Mance Holden Bacchus March
4 Graham Street
P: (03) 5367 4300 Fax: (03) 53674299

BERWICK
Barry Bourke Holden
755 Princes Highway
P: (03) 9707 2222 Fax: (03) 9707 3091

BUNDOORA
Watson Holden
413 Grimshaw Street
P: (03) 9467 4677 Fax: (03) 9467 7661

BURWOOD
Penfold Holden
142 Burwood Highway
P: (03) 9268 1333 Fax: (03) 9268 1335

CHELSEA
Harrison Holden
370 Nepean Highway
P: (03) 9772 2233 Fax: (03) 9772 2190

CHELTENHAM
Booran Holden
1212 Nepean Highway
P: (03) 9584 3333 Fax: (03) 9584 4285

DANDENONG
Booran Holden
17 Lonsdale Street
P: (03) 9794 5455 Fax: (03) 9792 4871

DONCASTER
Doncaster Holden
808 Doncaster Road
P: (03) 9848 1330 Fax: (03) 9848 1331

ELSTERNWICK
Summit Holden
67 Nepean Highway
P: (03) 9528 2222 Fax: (03) 9923 2633

ESSENDON
Preston Motors (Essendon) P/L
205~211 Keilor Road
P: (03) 9374 2888 Fax: (03) 9379 6754

FAWKNER
Mantello Holden
1263 Sydney Road
P: (03) 9359 1333 Fax: (03) 9359 9334

FERNTREEGULLY
Ferntree Gully Holden
980 Burwood Highway
P: (03) 9753 1222 Fax: (03) 9758 3435

FOOTSCRAY
Alan Mance Holden
435 Barkly Street
P: (03) 9396 8000 Fax: (03) 9396 8001

FRANKSTON
Bay City Holden
140 Dandenong Road
P: (03) 9784 4444 Fax: (03) 9784 4419

AUSTRALIAN HOLDEN DEALERS cont.

GEELONG
R & B Smith Holden
510 Moorabool Street
P: (03) 5222 2888 Fax: (03) 5221 3114

GEELONG
Winter & Taylor Holden
23 Cavendish Street
P: (03) 5222 1811 Fax: (03) 5221 1873

GLENHUNTLY
Booran Holden
1234 Glenhuntly Road
P: (03) 9571 9313 Fax: (03) 9571 8374

GLEN WAVERLEY
Geoff Brady Holden
565~577 Springvale Road
P: (03) 9550 5888 Fax: (03) 9550 5855

HASTINGS
John Collins Holden
2041 Frankston-Flinders Road
P: (03) 5979 4433 Fax: (03) 5975 4720

HEIDELBERG
Ralph D'Silva Holden
112 Bell Street
P: (03) 9479 4088 Fax: (03) 9479 2909

LILYDALE
Heritage Holden
344 Main Street
P: (03) 9735 5566 Fax: (03) 9735 1040

MELTON
Alan Mance Holden
1 Holland Drive
(03) 9746 9666 Fax: (03) 9746 9555

MORNINGTON
John Collins Holden
976 Nepean Highway
P: (03) 5975 4433 Fax: (03) 5975 4720

OAKLEIGH
Garry & Warren Smith
1575 Dandenong Road
P: (03) 9568 6333 Fax: (03) 9568 5691

PRESTON
Ralph D'Silva Holden
573~603 High Street
P: (03) 9471 0500 Fax: (03) 9478 4210

RINGWOOD
Patterson Cheney Holden
45~57 Maroondah Highway
P: (03) 9262 6666 Fax: (03) 9870 1113

SOUTH MELBOURNE
South City Holden
380 City Road
P: (03) 9627 3333 Fax: (03) 9682 6888

SOUTHYARRA
Penfold Holden
681 Chapel Street
P: (03) 9827 2272 Fax: (03) 9826 5328

SUNBURY
Sunbury Holden
93~95 Horne Street
P: (03) 9740 3000 Fax: (03) 9740 4777

SUNSHINE
Kevin Dennis Holden
272 Ballarat Road
P: (03) 9292 9292 Fax: (03) 9292 9200

WERRIBEE
Ballan Holden
56 Princes Highway
P: (03) 9974 8888 Fax: (03) 9974 8899

WESTMELBOURNE
Summit Holden
577 King Street
P: (03) 9329 6611 Fax: (03) 9329 1550

Vic. Country

ALEXANDRA
Alexandra Total Automotive Services
120 Grant Street
P: (03) 5772 1588 Fax: (03) 5772 1978

ARARAT
David Reid Motors
High Street
P: (03) 5352 4100 Fax: (03) 5352 4388

BAIRNSDALE
The Big Garage
628 Princes Highway
P: (03) 5152 4131 Fax: (03) 5152 5313

BALLARAT
Peter Amor Motors
211 Gillies Street
P: (03) 5339 9333 Fax: (03) 5339 9202

BENALLA
Arnott's Motors
88~90 Bridge Street
P: (03) 5762 2500 Fax: (03) 5762 1586

AUSTRALIAN HOLDEN DEALERS cont.

BENDIGO
Ron Poyser Holden
Cnr High & Myrtle Streets
P: (03) 5442 3999 Fax: (03) 5442 7766

CAMPERDOWN
Camperdown Auto Parts
96 Manifold Street
P: (03) 5593 1983 Fax: (03) 5593 1979

CASTERTON
Coxons Holden
139 Henty Street
P: (03) 5581 1166 Fax: (03) 5581 2116

CHARLTON
Walsh Motors, Charlton
70~74 High Street
P: (03) 5491 1444 Fax: (03) 5491 1984

COBRAM
Neville Mustica Motors
Murray Valley Hwy
P: (03) 5872 1666 Fax: (03) 5872 1920

COHUNA
Hare Motors Holden
105~107 King George Street
P: (03) 5456 4488 Fax: (03) 5456 4448

COLAC
Parker Bros. Motor Co
224 Murray Street
P: (03) 5231 5533 Fax: (03) 5231 3853

COROWA
Jasper Bros. Pty Ltd
36 Sanger Street
P: (03) 6033 0391 Fax: (03) 6033 3319

DAYLESFORD
K.R. Little
Vincent Street
P: (03) 5348 2248

DONALD
O.A. Shilton & Sons Pty Ltd
5 Woods Street
P: (03) 5497 1400 Fax: (03) 5497 1505

ECHUCA
Echuca Motors
1 Nothern Highway
P: (03) 5482 1522 Fax: (03) 5480 6215

EUROA
Parker Bros Auto Co. Euroa
37~41 Clifton Street
P:(03) 5795 2702 Fax: (03) 5795 1288

HAMILTON
Bloods of Hamilton
210 Gray Street
P: (03) 5572 1433 Fax: (03) 5571 1182

HOPETOUN
Hopetoun Motors
78 Lascelles Street
P: (03) 5083 3143 Fax: (03) 5083 3290

HORSHAM
Ivan Morrow Motors Pty Ltd
22 O’Callaghans Parade
P: (03) 5382 0185 Fax: (03) 5382 0459

KANIVA
Kaniva Motors
82 Commercial Street
P: (03) 5392 2300 Fax: (03) 5392 2589

KOO WEE RUP
G & J Light Mechanical Repairs P/L
Station Road
P: (03) 5997 1325

KORUMBURRA
Peter Dunlevie Holden
42 Commercial Street
P: (03) 5655 1288 Fax: (03) 5655 1839

KYABRAM
D’Alberto Holden
60 McEwen Road
P: (03) 5852 1366 Fax: (03) 5852 1337

KYNETON
Mollison Motors Pty Ltd
167 Mollison Street
P: (03) 5422 3377 Fax: (03) 5422 3501

LEONGATHA
Gleeson Holden
37~43 Bair Street
P: (03) 5662 2361 Fax: (03) 5655 1839

MANSFIELD
Martin's Garage
52~54 Chenery Street
P: (03) 5775 2610 Fax: (03) 5775 1179

MARYBOROUGH
Graham Jacka Holden
35 Nolan Street
P: (03) 5461 1011 Fax: (03) 5461 4789

MILDURA
Stuart & Harrison (Sales) Pty Ltd
24~40A Deakin Avenue
P: (03) 5023 0051 Fax: (03) 5021 3076

AUSTRALIAN HOLDEN DEALERS cont.

MORTLAKE
W. Christian (Mortlake) Pty. Ltd.
107 Dunlop Street
P: (03) 5599 2301 Fax: (03) 5599 2567

MURRAYVILLE
Peers Motors
McKenzie Street
P: (03) 5095 2081 Fax: (03) 5095 2054

NHILL
Ivan Morrow Motors Pty Ltd
71~73 Nelson Street
P: (03) 5391 1333 Fax: (03) 5391 1228

ORBOST
Merlin Motors
Stanley Street
P: (03) 5154 1909

PORTLAND
Reynolds of Portland
Henty Highway
P: (03) 5523 1688 Fax: (03) 5523 6299

QUAMBATOOK
Quambatook Auto Services
32 Gutherie Street
P: (03) 5457 1237 Fax: (03) 5457 1420

ROCHESTER
Bruce Hocking Motors Pty Ltd
85 Lowry Street
P: (03) 5484 1455 Fax: (03) 5484 1140

RUTHERGLEN
Jasper Bros Pty Ltd
62 Main Street
P: (02) 6032 8404 Fax: (02) 6032 8156

SALE
Sam Gould Holden
273 York Street
P: (03) 5144 3944 Fax: (03) 5144 6289

SEYMOUR
Neil Beer Holden
49 Emily Street
P: (03) 5792 2777 Fax: (03) 5792 4111

SHEPPARTON
Parker Bros. Auto Co.
Benalla Road
P: (03) 5822 2666 Fax: (03) 5831 2507

STAWELL
Howden Holden
72~74 Longfield Street
P: (03) 5358 1888 Fax: (03) 5358 3954

SWAN HILL
Swan Hill Holden
94~102 Campbell Street
P: (03) 5033 1800 Fax: (03) 5032 2468

TALLANGATTA
Crispin Motors
21 Towong Street
P: (02) 6071 2414 Fax: (02) 6071 2655

TERANG
W. Christian (Terang) Pty Ltd
6a Baynes Street
P: (03) 5592 1588 Fax: (03) 5592 1481

TIMBOON
Timboon Motors
56 Bailey Street
P: (03) 5598 3007 Fax: (03) 5598 3362

TRARALGON
Colin Watson Holden
Princes Highway
P: (03) 5174 8000 Fax: (03) 5175 0050

UNDERBOOL
A.J. Gloster & Sons
Cotter Street
P: (03) 5094 6291 Fax: (03) 5094 6297

WANGARATTA
Alan Capp (New Cars) Pty Ltd
29 Tone Road
P: (03) 5721 2133 Fax: (03) 5721 4626

WARRACKNABEAL
Amor Motors Aubrey Truck Sales
33 Woolcock Street
P: (03) 5394 1055 Fax: (03) 5398 1904

WARRAGUL
Barry Bourke Warragul
167 Queen Street
P: (03) 5622 0000 Fax: (03) 5622 0333

WARRNAMBOOL
Callaghan Motors Pty Ltd
133~137 Fairy Street
P: (03) 5561 8700 Fax: (03) 5561 8740

WODONGA
McRae White Motors
182 Melbourne Road
P: (02) 6056 2333 Fax: (02) 6024 7899

AUSTRALIAN HOLDEN DEALERS cont.

WONTHAGGI
Wonthaggi Holden
2 Murray Street
P: (03) 5672 1122 Fax: (03) 5672 4141

YARRAM
John Palmer Holden
150 Commercial Road
P: (03) 5182 5122 Fax: (03) 5182 6166

YARRAWONGA
Pigdons
155 Belmore Street
P: (03) 5743 1577 Fax: (03) 5744 1788

Qld. Metropolitan

ASPLEY
Zupps Aspley Pty Ltd
1454 Gympie Road
P: (07) 3246 8000 Fax: (07) 3246 8092

BROWNS PLAINS
Zupps Hillcrest
Cnr Anzac Ave & Corporate Place,
Hillcrest,
P: (07) 3802 4000 Fax: (07) 3802 4099

CAPALABA
Oldfield Holden
103 Redland Bay Road
P: (07) 3245 2200 Fax: (07) 3245 2221

INDOOROOPILLY
Westpoint Holden
440 Moggill Road
P: (07) 3878 0440 Fax: (07) 3878 1340

IPSWICH
Ross Llewellyn Holden
246 Brisbane Road
P: (07) 3282 2922 Fax: (07) 3282 6359

LAIDLEY
Buhse's Garage
5 Spicer Street
P: (07) 5465 1406 Fax: (07) 5465 1706

MOOROOKA
John Sivyer Holden
1060 Ipswich Road
P: (07) 3892 3344 Fax: (07) 3848 8866

MT. GRAVATT
Zupps Motors Pty Ltd
1310 Logan Road
P: (07) 3877 0000 Fax: (07) 3877 0063

NEWSTEAD
Eagers Holden
95 Breakfast Creek Road
P: (07) 3364 1199 Fax: (07) 3364 1060

PETRIE
Village Motors
1059 Gympie Road
P: (07) 3285 2244 Fax: (07) 3285 1975

REDCLIFFE
Village Holden
425 Elizabeth Avenue
P: (07) 3883 0900 Fax: (07) 3883 2711

SPRINGWOOD
Motorama Holden
3455 Pacific Highway
P: (07) 3804 4888 Fax: (07) 3208 7018

WINDSOR
Eagers Holden
143 Newmarket Road
P: (07) 3357 6711 Fax: (07) 3357 5403

WOOLLOONGABBA
Armstrong Holden
73 Ipswich Road
P: (07) 3891 5522 Fax: (07) 3891 5146

WYNNUM
Doug Barton Holden
200 Tingal Road
P: (07) 3396 7777 Fax: (07) 3393 3593

Qld. Country

ATHERTON
Redding Motors Pty Ltd
2 Cook Street
P: (07) 4091 1344 Fax: (07) 4091 2039

AYR
Honeycombes Sales & Service
213~217 Queen Street
P: (07) 4783 2344 Fax: (07) 4783 2079

BEAUDESERT
Zupps Beaudesert
57 Brisbane Street
P: (07) 5541 2000 Fax: (07) 5541 3368

AUSTRALIAN HOLDEN DEALERS cont.

BILOELA
Andersons Auto City
Dawson Highway
P: (07) 4992 2833 Fax: (07) 4992 3066

BOWEN
McDermott Holden
98 Herbert Street
P: (07) 4786 1430 Fax: (07) 4786 2903

BUNDABERG
Ross Gray Holden
Takalvan Street
P: (07) 4150 1333 Fax: (07) 4150 1318

CABOOLTURE
Beecham Holden
Bribie Island Road
P: (07) 5495 1477 Fax: (07) 5495 2839

CAIRNS
Ireland Holden
227~233 Mulgrave Road
P: (07) 4052 3666 Fax: (07) 4052 3606

CALOUNDRA
Caloundra City Holden
45 Caloundra Road
P: (07) 5491 5522 Fax: (07) 5491 8016

CHARTERS TOWERS
Peters Holden
57 Mosman Street
P: (07) 4787 1177 Fax: (07) 4787 4858

CHARLEVILLE
Alan Dobbin Holden
129 Alfred Street
P: (07) 4654 1737 Fax: (07) 4654 3254

CHINCHILLA
Ainsworth Motors & Machinery Pty Ltd
55 Chinchilla Street
P: (07) 4662 7286 Fax: (07) 4662 7197

DALBY
Johnson's Holden
36 Drayton Street
P: (07) 4662 2422 Fax: (07) 4662 4311

EMERALD
Emerald Holden
Hospital Road
P: (07) 4983 9888 Fax: (07) 4983 9889

GATTON
Gatton Auto Centre
67 Railway Street
P: (07) 5462 1633 Fax: (07) 5462 1980

GLADSTONE
Andersons Auto City
56 Yarroon Street
P: (07) 4972 1177 Fax: (07) 4972 9141

GOONDIWINDI
Goondiwindi Holden
45 Russell Street
P: (07) 4671 0266 Fax: (07) 4671 0288

GYMPIE
Madills Holden
35 Mellor Street
P: (07) 5480 5500 Fax: (07) 5482 2672

HERVEY BAY
Whitaker Holden
96 Torquay Road
P: (07) 4128 1722

INGHAM
Devietti Holden
99 Lannercost Street
P: (07) 4776 1599 Fax: (07) 4776 3547

INNISFAIL
I.C. Taylor Pty Ltd
117 Edith Street
P: (07) 4061 1577 Fax: (07) 4061 3963

JULIA CREEK
Julia Creek Motors Pty Ltd
Burke Street
P: (07) 4746 7155 Fax: (07) 4746 7197

KILCOY
Hobart's Garage
58 Mary Street
P: (07) 5497 1204 Fax: (07) 5497 1204

KINGAROY
John Dundas Pty Ltd
79 Kingaroy Street
P: (07) 4162 1722 Fax: (07) 4162 3756

LONGREACH
Longreach Motors
33 Swan Street
P: (07) 4658 1700 Fax: (07) 4658 1857

MACKAY
Pioneer Holden
Cnr Gordon & Wellington Streets
P: (07) 4969 4299 Fax: (07) 4969 4288

AUSTRALIAN HOLDEN DEALERS cont.

MAROOCHYDORE
Sunco Holden
Wises Road
P: (07) 5443 7644 Fax: (07) 5443 7645

MARYBOROUGH
Whitaker Holden
109~111 March Street
P: (07) 4122 2255 Fax: (07) 4122 6222

MOUNT ISA
Bruce Marles Motor City
Marian Street
P: (07) 4743 3044 Fax: (07) 4743 8466

MURGON
Clifton Motors
Macalister Street
P: (07) 4168 1066 Fax: (07) 4168 1947

NAMBOUR
Sunco
Bruce Highway
P: (07) 5451 2000 Fax: (07) 5451 2099

NANANGO
Nanango Motors Pty Ltd
102 Drayton Street
P: (07) 4163 1108 Fax: (07) 4163 1108

NOOSAVILLE
Madill's
Lot 1 Lionel Donovan Drive
P: (07) 5470 0700 Fax: (07) 5474 0073

PROSERPINE
Crossley Car Sales Whitsunday Pty Ltd
162~164 Main Street
P: (07) 4945 1822 Fax: (07) 4945 2022

ROBINA
Robina Holden
16 Brabham Circuit
P: (07) 5575 0500 Fax: (07) 5562 1072

ROCKHAMPTON
Lawrence’s
327 Richardson Road
P: (07) 4930 5111 Fax: (07) 4930 5112

ROMA
Maranoa Multi Agencies
Bowen Street
P: (07) 4622 2900 Fax: (07) 4622 1832

SOUTHPORT
Lockhart Holden
Cnr Nerang Road & Olsen Avenue
P: (07) 5597 2900 Fax: (07) 5597 2542

SPRINGSURE
Springsure Motors
Eclipse Street
P: (07) 4984 1177 Fax: (07) 4984 1361

ST. GEORGE
Halpin Motors
39~41 Grey Street
P: (07) 4625 5466 Fax: (07) 4625 5855

STANTHORPE
Central Motors
42 Maryland Street
P: (07) 4681 2200 Fax: (07) 4681 1479

TOOWOOMBA
Toowoomba Holden
Cnr James & Hume Streets
P: (07) 4690 0900 Fax: (07) 4690 0909

TOWNSVILLE
Tony Ireland Holden
87~91 Charters Towers Road
P: (07) 4726 7777 Fax: (07) 4721 1486

TULLY
Island Coast Holden
Bruce Highway
P: (07) 4068 1288 Fax: (07) 4068 2145

WARWICK
Deighton Motors Pty Ltd
Grafton Street
P: (07) 4661 2266 Fax: (07) 4661 1275

N.T.

ALICE SPRINGS
Peter Kittle Holden
46 Stuart Highway
P: (08) 8952 5500 Fax: (08) 8953 0847

DARWIN
Kerry Holden
21~25 Stuart Highway
P: (08) 8980 8080 Fax: (08) 8980 8081

KATHERINE
Wyn Holden
Lot 2399 Victoria Highway
P: (08) (08) 8972 2422 Fax: (08) 8971 0571

TENNANT CREEK
Kittles Holden
Paterson Street
P: (08) 8962 2251 Fax: (08) 8962 2527

AUSTRALIAN HOLDEN DEALERS cont.

S.A. Metropolitan

ADELAIDE
City Holden
223 Grenfell Street
P: (08) 8223 7666 Fax: (08) 8359 2588

ELIZABETH
Peter Page Holden
17 Elizabeth Way
P: (08) 8255 1288 Fax: (08) 8255 9260

HILLCREST
City Holden
327~329 Main North East Road
P: (08) 8261 5855 Fax: (08) 8369 0066

MALVERN
Claridge Holden
361~367 Unley Road
P: (08) 8272 1600 Fax: (08) 8373 0057

PORT ADELAIDE
Smiths of Port Adelaide
271 Commercial Road
P: (08) 8341 2255 Fax: (08) 8341 2233

PROSPECT
Metro Holden
84~88 Main North Road
P:(08) 8343 5000 Fax: (08) 8344 9670

REYNELLA
Southgate Holden
49~59 Main South Road
P: (08) 8381 9555 Fax: (08) 8381 6274

ROSE PARK
City Holden
14 Kensington Road
P: (08) 8334 4666 Fax: (08) 8334 4610

SOMERTON PARK
Hamilton Holden
278~288 Brighton Road
P: (08) 8179 4300 Fax: (08) 8358 3957

THEBARTON
Metro Holden
1 Port Road
P: (08) 8354 9555 Fax: (08) 8443 6855

VALLEY VIEW
Plaza Holden
817~839 North East Road
P: (08) 8263 4922 Fax: (08) 8265 5200

S.A. Country

BALAKLAVA
Balaklava Motors
4 Wallace Street
P: (08) 8862 1030 Fax: (08) 8862 2000

BERRI
Rosenthal Bros Pty Ltd
Vaughan Terrace
P: (08) 8582 3644 Fax: (08) 8582 3515

BORDERTOWN
Farmers Centre
South Terrace
P: (08) 8752 0266 Fax: (08) 8752 0233

CEDUNA
Beck Motors Pty Ltd
Poynton Street
P: (08) 8625 2616 Fax: (08) 8625 3201

CLARE
Mid North Motor Company
7 Old North Road
P: (08) 8842 2200 Fax: (08) 8842 2886

CLEVE
Pringles Ag. Plus
Rudall Road
P: (08) 8628 2150 Fax: (08) 8628 2537

CRYSTAL BROOK
Crouch Rural Pty. Ltd
26 Brandis Street
P: (08) 8636 2257 Fax: (08) 8636 2088

GAWLER
Steinborner Holden
Cnr Murray & Bridge Sts
P: (08) 8522 4222 Fax: (08) 8522 4898

KADINA
J.H. Rosewarne Pty Ltd
Graves Street
P: (08) 8821 1111 Fax: (08) 8821 1686

KEITH
Farmers Centre
McBain Street
P: (08) 8755 3222 Fax: (08) 8755 3211

KINGSTON
Lecornu's Service Garage
Agnes Street
P: (08) 8767 2424 Fax: (08) 8767 2533

AUSTRALIAN HOLDEN DEALERS cont.

LOXTON
Flight Motors Pty Ltd
Bookpurnong Terrace
P: (08) 8584 7277 Fax: (08) 8584 5937

MINLATON
Southway
9 Fifth Street
P: (08) 8853 2322 Fax: (08) 8853 2451

MENINGIE
Peter Hood Holden
Cnr Princes Highway & Coonalpyn Road
P: (08) 8575 1109 Fax: (08) 8575 1537

MT. BARKER
Gilbert Motors
57 Adelaide Road
P: (08) 8391 1500 Fax: (08) 8398 2124

MT. GAMBIER
O.G. Roberts & Co
Jubilee Highway West
P: (08) 8724 1111 Fax: (08) 8724 1100

MURRAY BRIDGE
Dutton Motors Pty Ltd
7 Adelaide Road
P: (08) 8532 1999 Fax: (08) 8531 0599

NARACOORTE
Kingcraig Motors Pty Ltd
158~164 Smith Street
P: (08) 8762 1555 Fax: (08) 8762 1806

PORT AUGUSTA
Augusta Motor Company Pty Ltd
38 Stirling Road
P: (08) 8641 0488 Fax: (08) 8642 4300

PORT LINCOLN
City Motors
King Street
P: (08) 8682 1100 Fax: (08) 8682 4734

PORT PIRIE
Spencer Holden
50 Ellen Street
P: (08) 8632 3888 Fax: (08) 8632 6405

RENMARK
Rosenthal Motors Pty Ltd
Ral Ral Avenue
P: (08) 8586 6626 Fax: (08) 8586 4040

STRATHALBYN
Gilbert Holden - Strathalbyn
High Street
P: (08) 8536 2066 Fax: (08) 8536 2672

TANUNDA
Hage & Co Pty Ltd
50 Murray Street
P: (08) 8563 2123 Fax: (08) 8563 3488

VICTOR HARBOR
Southern Motors Holden
5 Victoria Street
P: (08) 8552 1255 Fax: (08) 8552 2788

WAIKERIE
Riverside Holden
6 Crush Terrace
P: (08) 8541 2900 Fax: (08) 8541 3325

WHYALLA
McLeods Whyalla Motor Company
64 Essington Lewis Avenue
P: (08) 8645 7388 Fax: (08) 8645 5512

YANKALILLA
Martin Motors Pty Ltd
Main Street
P: (08) 8558 2052 Fax: (08) 8558 2911

W.A. Metropolitan

CANNINGTON
Brian Gardner Holden
1308~1324 Albany Hwy
P: (08) 9356 9000 Fax: (08) 9458 9144

FREMANTLE
Shacks Holden
64 Queen Victoria Street
P: (08) 9432 9432 Fax: (08) 9432 9456

GOSNELLS
Gibbons Holden
2325 Albany Highway
P: (08) 9398 2211 Fax: (08) 9398 5683

MELVILLE
Melville Holden
532~540 Canning Highway
P: (08) 9333 5333 Fax: (08) 9333 5300

AUSTRALIAN HOLDEN DEALERS cont.

MIDLAND
Goldy Holden
161 Great Eastern Highway
P: (08) 9274 8000 Fax: (08) 9274 6042

MORLEY
Metro Motors Holden
212 Walter Road West
P: (08) 9449 3522 Fax: (08) 9449 3596

OSBORNE PARK
North City Holden
Cnr Scarborough Beach Rd & Harborne St
P: (08) 9273 2222 Fax: (08) 9273 2220

PERTH
City Motors
505 Newcastle Street
P: (08) 9422 7777 Fax: (08) 9422 7630

ROCKINGHAM
Rockingham Holden
20 Smeaton Way
P: (08) 9550 9550 Fax: (08) 9550 9599

VICTORIA PARK
Youngs Holden
529 Albany Highway
P: (08) 9449 9449 Fax: (08) 9449 9494

WANNEROO
Phoenix Holden
5 Berriman Drive
P: (08) 9409 9200 Fax: (08) 9309 2140

W.A. Country

ALBANY
Albany City Holden
92~98 Earl Street
P: (08) 9842 8000 Fax: (08) 9841 8623

BRIDGETOWN
Kordics Bridgetown
183 Hampton Street
P: (08) 9761 1377 Fax: (08) 9761 2151

BROOKTON
Coote Motors
1 Robinson Road
P: (08) 9642 1108 Fax: (08) 9642 1003

BROOME
Norwest Holden
7 McPherson Street
P: (08) 9192 1277 Fax: (08) 9193 5249

BUNBURY
Bunbury Holden
3 Sandridge Road
P: (08) 9791 3899 Fax: (08) 9791 2990

BUSSELTON
Fennessy's
4~8 Bussel Hwy
P: (08) 9752 1577 Fax: (08) 9752 4080

CARNAMAH
T & H Walton Stores Pty Ltd
Robertson Street
P: (08) 9951 1130 Fax: (08) 9951 1082

CARNARVON
North West Autos
229 Robinson Street
P: (08) 9941 1159 Fax: (08) 9941 1363

COLLIE
Station Motors
84 Throssell Street
P: (08) 9734 1855 Fax: (08) 9734 1913

ESPERANCE
Dempster Holden
Norseman Road
P: (08) 9071 1155 Fax: (08) 9071 3799

GERALDTON
Young Motors
34 Cathedral Avenue
P: (08) 9921 1088 Fax: (08) 9964 1157

GNOWANGERUP
Umtali Nominees Pty Ltd
10 Youngenup Road
P: (08) 9827 1207 Fax: (08) 9827 1444

HARVEY
Stockman Holden
111 Uduc Road
P: (08) 9729 3333 Fax: (08) 9729 1140

KALGOORLIE
Golden City Holden
114 Boulder Road
P: (08) 9021 1699 Fax: (08) 9021 5737

AUSTRALIAN HOLDEN DEALERS cont.

KARRATHA
Moxham Motors
Lot 4551 Balmoral Road
P: (08) 9144 1225 Fax: (08) 9144 1258

KATANNING
Edwards Holden
159 Clive Street
P: (08) 9821 2388 Fax: (08) 9821 2429

KELLERBERRIN
Dowding Motors
1 Mitchell Street
P: (08) 9045 4141 Fax: (08) 9045 4466

KUNUNURRA
Argyle Holden
Lot 231 Bloodwood Drive
P: (08) 9168 2236 Fax: (08) 9169 1124

MANDURAH
Mandurah Holden
53 Pinjarra Rd
P: (08) 9535 8777 Fax: (08) 9535 8822

MANJIMUP
Manjimup Automotive Services
Pritchard Street
P: (08) 9771 1388 Fax: (08) 9777 1214

MOORA
Frank Lewis Holden
92 Gardiner Street
P: (08) 9651 1408 Fax: (08) 9651 1724

NAREMBEEN
Aquip Machinery
20 Churchill Avenue
P: (08) 9064 7214 Fax: (08) 9064 7065

NORTHAM
Withnell Motors
58 Fitzgerald Street
P: (08) 9622 5073 Fax: (08) 9622 3664

PORT HEDLAND
Moxham Motors
15 Anderson Street
P:(08) 9173 3660 Fax: (08) 9144 1258

NEW ZEALAND HOLDEN DEALERS

Auckland Metropolitan

HENDERSON
West City Holden
435 Great North Road
P: (09) 836 0097 Fax: (09) 837 5291

MANUKAU
Davie Motors Limited
58 Cavendish Drive
P: (09) 262 1012 Fax: (09) 262 1011

NEWMARKET
Schofield & Co. Limited
50 Great South Road
P: (09) 520 6369 Fax: (09) 524 1500

PANMURE
Moyes Motor Group Limited
510 Ellerslie/Panmure Highway
P: (09) 527 1200 Fax: (09) 527 8314

TAKAPUNA
Giltrap Holden
Wairau Road
P: (09) 444 8114 Fax: (09) 444 8008

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ALEXANDRA
Currie Motors
65 Centennial Avenue
P: (03) 448 6989 Fax: (03) 448 9384

AMBERLEY
Arthur Burke Limited
Markham Street
P: (03) 314 8121 Fax: (03) 314 8281

ASHBURTON
Smallbone Brothers Limited
Cnr. Burnett & Cass Streets
P: (03) 308 7159 Fax: (03) 308 5551

BLENHEIM
Wadsco Motors Limited
55-59 Scott Street
P: (03) 578 5199 Fax: (03) 578 2572

CHRISTCHURCH
Blackwell Motors Limited
Cnr. Cashell/Madras Streets
P: (03) 379 5500 Fax: (03) 366 4683

DUNEDIN
Cooke Howlison Limited
484 Andersons Bay Road
P: (03) 456 0570 Fax: (03) 455 5668

DARGAVILLE
Marcel Motors Limited
34 Victoria Street
P: (09) 439 7399 Fax: (09) 439 7399

GISBORNE
Enterprise Cars (1992) Limited
323 Gladstone Street
P: (06) 867 8368 Fax: (06) 867 1280

HAMILTON
Ebbett Waikato Limited
Anglesea Street
P: (07) 838 0949 Fax: (07) 838 3380

HASTINGS
Karamu Holden
Cnr. Karamu Road & Albert Street
P: (06) 876 6700 Fax: (06) 876 6664

HAWERA
Moller Johnson Motors (Hawera) Limited
39-49 Regent Street
P: (06) 278 7166 Fax: (06) 278 5054

INVERCARGILL
GWD-Russells Limited
22 Yarrow Street
P: (03) 218 2149 Fax: (03) 218 3309

KAIKOHE
Bay Motors Limited
Wihongi Street
P: (09) 401 1860 Fax: (09) 401 0883

KAITAIA
Jim Crene Motors Limited
Melba Street
P: (09) 408 1310 Fax: (09) 408 1311

LEVIN
Horowhenua Motor Co. Limited
1-11 Exeter Street
P: (06) 368 7169 Fax: (06) 368 8536

LOWER HUTT
Brendan Foot Motors Limited
16-18 Railway Avenue
P: (04) 587 0005 Fax: (04) 566 2311

MASTERTON
Wagg & Harcombe Limited
87-93 Dixon Street
P: (06) 377 5169 Fax: (06) 378 8840

MATAMATA
Matamata Motor Group Limited
2 Arawa Street
P: (07) 888 7059 Fax: (07) 888 5709

MORRINSVILLE
Nicholson United Autos
Thames Street
P: (07) 889 7042 Fax: (07) 889 3529

NEW ZEALAND HOLDEN DEALERS cont.

NAPIER
Karamu Holden
Cnr Wellesley Rd & Thakeray St
P: (06) 874 3033 Fax: (06) 834 1454

NELSON
Nelson Bays Holden
2 Selwyn Place
P: (03) 545 7222 Fax: (03) 545 6057

NEW PLYMOUTH
Auto City
86 Molesworth Street
P: (06) 758 0919 Fax: (06) 758 5330

OAMARU
North Otago Motor Group Limited
24-30 Severn Street
P: (03) 434 5099 Fax: (03) 434 9983

OTOROHANGA
Pat Prescott Limited
205 Maniapoto Street
P: (07) 873 7119 Fax: (07) 873 7156

PAEROA
Linn Motors Limited
10-12 Belmont Road
P: (07) 862 8715 Fax: (07) 862 8711

PAHIATUA
Jones Motors Limited
34 Main Street
P: (06) 376 7524 Fax: (06) 376 7192

PALMERSTON NORTH
Robertson Motors
200 Rangitikei Street
P: (06) 358 1062 Fax: (06) 359 0303

PARAPARAUMU
Guy Weaver's Auto Village
Main Road
P: (04) 298 8089 Fax: (04) 298 7186

PUKEKOHE
Counties Motorcourt Limited
Cnr. Edinburgh & Tobin Streets
P: (09) 238 3259 Fax: (09) 238 3298

ROTORUA
Shorland Slater Limited
Old Taupo Road
P: (07) 348 3179 Fax: (07) 347 1503

STRATFORD
Ansford Johnson Limited
369 Broadway
P: (06) 765 6119 Fax: (06) 765 7410

TAUPO
Taupo Holden
Ruapehu Street
P: (07) 378 4130 Fax: (07) 378 0357

TAUMARANUI
Turaki Motors Limited
Hakiaha Street
P: (07) 895 7009 Fax: (07) 895 8909

TAURANGA
Ebbett Tauranga
Cnr. Wharf Street & Cameron Road
P: (07) 578 2843 Fax: (07) 578 6044

TE AROHA
Summit Motor Co. Limited
Kenrick Street
P: (07) 884 8174 Fax: (07) 884 8133

TE AWAMUTU
Rosetown Motors Limited
Cnr. Churchill & Mahoe Streets
P: (07) 871 5143 Fax: (07) 871 5045

TE PUKE
Bob Batchelor Motors Limited
Jellicoe Street
P: (07) 573 9781 Fax: (07) 573 6057

THAMES
Linn Motors
429 Pollen Street
P: (07) 868 9591 Fax: (07) 868 9595

TIMARU
Hervey Motors Limited
6 Sefton Street
P: (03) 684 7179 Fax: (03) 684 7176

UPPER HUTT
Twin Lakes Motor Company
Fergusson Drive
P: (04) 528 5609 Fax: (04) 527 8390

WANGANUI
Bob Burgess Motors Limited
1 Purnell Street
P: (06) 345 5588 Fax: (06) 345 5584

WELLINGTON
Williams & Adams
72-82 Taranaki Street
P: (04) 801 6777 Fax: (04) 385 7437

WHAKATANE
Harts Limited
Commerce Street
P: (07) 308 6334 Fax: (07) 307 1536

WHANGAREI
Mark Cromie Holden
5-13 Hannah Street
P: (09) 438 3199 Fax: (09) 438 2646

CHAPTER 10

Tow and Load

Page

10-2 Loading the vehicle
10-5 Towing
10-6 Safe towing tips

LOADING THE VEHICLE

Notes on loading the vehicle

- Loads should not protrude above the upper edge of the rear seat backrests, or above the upper edge of the front seat backrests if the rear seat backrests are folded down.
- Heavy objects should be secured with lashing straps (if fitted). If heavy loads slip when the vehicle is braked heavily or driven around a bend, the handling of the vehicle may change.
- No object should be placed in front of the rear window or on the instrument panel. They are reflected in the glass, obstruct the driver's view and will be thrown through the vehicle in the event of heavy braking or an accident, causing injury to occupants.
- Bulky objects should not be transported with the boot / tailgate open or ajar, otherwise poisonous exhaust fumes may enter the vehicle. In addition, the number plate is only clearly distinguishable and lit correctly if the boot / tailgate is closed.
- Driving with a roof load increases the sensitivity of the vehicle to cross winds and affects vehicle handling owing to the higher centre of gravity of the vehicle.
- No object should be placed in the area that the airbags inflate. The object could cause injury if the airbags are triggered.
- Overloading is a safety hazard and could also shorten the life of your vehicle or its parts.

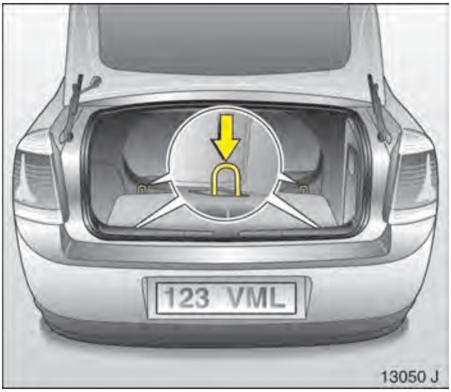
Lashing eyes (if fitted)

Lashing eyes are located in the luggage compartment, as illustrated. Use these to secure cargo (for example, heavy objects).

WARNING:

The recommended carrying capacity of your vehicle is 408 kg (including five occupants and luggage).

If you load your vehicle other than to the above recommendations then you should ensure that the MAXIMUM REAR AXLE LOAD and the MAXIMUM FRONT AXLE LOADS are not exceeded.



LOADING THE VEHICLE cont.

Curb weights and axle loads

- The curb weights shown below are for the weight of an unloaded vehicle, without any options, but with a full tank of fuel.
- When loading the vehicle, do not exceed the maximum allowable axle loads shown below.
- Remember to include the tow ball load and roof rack load when determining the rear axle load. For the tow ball load, refer to Towing, in this chapter.

If unsure, the vehicle should be weighed at a weighbridge.

WEIGHT (in kg)	CD				CDX	CDXi	
	Sedan		Hatch		Hatch	Hatch	
Engine	2.2		2.2		3.2	3.2	
Transmission	man	auto	man	auto	auto	man	auto
Curb	1435	1465	1450	1480	1528	1503	1528
Max front axle load	975	1005	975	1005	1075	1045	1075
Max rear axle load	960	960	980	980	980	980	980

Roof rack loads

For safety reasons and to avoid damaging the roof, only use the Holden approved roof rack for your vehicle. The load should be distributed evenly and secured tightly with straps so that it cannot slip.

WARNING:

The maximum allowable roof load is 100 kg (loaded onto the roof rack).

Roof rack loads alter the handling of a vehicle, due to a change in the centre of gravity. When carrying loads on the roof rack avoid abrupt swerving or sharp steering. The load should be evenly distributed. The weight on the roof must be included when working out the maximum axle loads; the roof load should be treated as luggage.

LOADING THE VEHICLE cont.

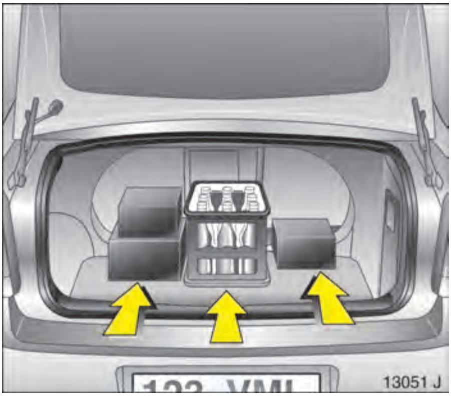
Heavy objects

Heavy objects in the load compartment should be placed as far forward as possible against the rear seat backrests. If the rear seat-backs are folded down, the objects should be placed against the front seat backrests.

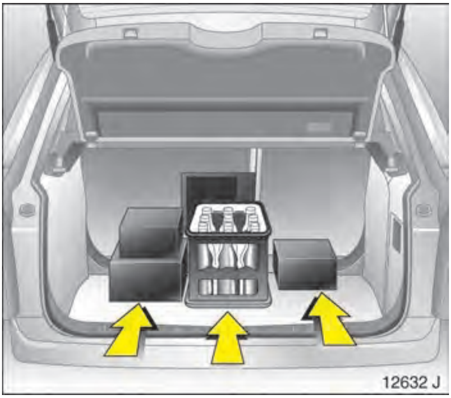
If the objects are to be stacked, heavier objects should be placed at the bottom.

Unsecured objects in the luggage / load compartment could be thrown forward with great force during heavy braking or in an accident.

Refer to Chapter 3 for adjustment of the rear seat seat-backs.



Sedan



Hatch

Gas cylinders

WARNING:

Gas cylinders can leak, creating a risk of fire or explosion. As a precaution, ensure adequate ventilation when carrying gas cylinders. They must be restrained from rolling around, and where possible, placed in the load area of the vehicle. It is recommended that if gas cylinders are frequently transported that a purpose built carrying compartment be used. Transportation of gas cylinders is regulated by legislation in some states.

TOWING

Your vehicle is designed primarily as a passenger vehicle, so handling, durability and economy may be affected by towing a caravan or trailer. Before attempting any towing, ensure that the correct equipment is fitted.

Engine	Z 22 SE		Z 32 SE	
	Trailer brakes fitted	Trailer brakes not fitted	Trailer brakes fitted	Trailer brakes not fitted
Towing capacity	1500 kg	715 kg	1600 kg	750 kg

In higher elevations and / or mountainous terrain, the maximum towing and loading limits should be reduced.

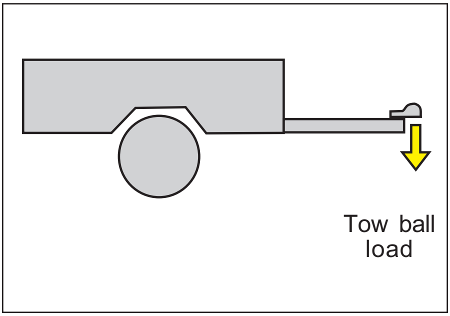
Note: Holden towing equipment is recommended where it is available. Where it is not available, no recommendation is made as to the make of equipment which should be used. Holden will not accept liability for defects occurring in towing equipment not marketed by Holden or for defects in the vehicle arising from the use of such equipment or for loss or injury caused by use of such equipment. The use of such equipment may void your New Vehicle Warranty, to the extent that Holden considers the non-recommended equipment affects the specifications or quality of your Holden vehicle.

Tow ball load

The tow ball load is the static weight on the tow ball and therefore, on the tow bar.

Ideally, the tow ball load should be 10% of the loaded trailer / caravan weight. This can be corrected by adjusting the location of the contents in the trailer / caravan (by moving items forwards or backwards within the trailer / caravan).

If the ball load is too light or too heavy, the steering and handling of the vehicle is affected.



The load on the tow ball should be included as luggage weight when working out the load that your vehicle is carrying.

If the vehicle is fully loaded before hitching the trailer / caravan, some luggage may need to be moved from the vehicle to the trailer / caravan to achieve the correct tow ball load.

When measuring the tow ball load (a public weighbridge is suggested), make sure that the drawbar of the loaded trailer / caravan is at the same height as it will be when the trailer / caravan is mounted on the vehicle. This is particularly important for trailer / caravans with tandem axles.

SAFE TOWING TIPS

- Your vehicle will handle differently when towing. It is a good idea to make a couple of short distance trips with the trailer / caravan before you set off on a long trip.
- Have your vehicle correctly maintained and serviced.
- Have your trailer / caravan maintained and serviced, with particular attention given to the condition of the brakes, tyres, suspension, wheel bearings, towing coupling and lighting.
- You should have an extended-arm mirror fitted on both sides of your vehicle.
- Headlight aim may need adjusting after the load has been hitched, particularly if a load equalising hitch is not used.
- Use a lower gear, rather than your brakes, when descending steep hills.
- If your trailer / caravan moves off the road behind you, allow the left wheels of your vehicle to move off as well. When it is safe to do so, carefully steer back on to the road. A sudden attempt to steer back on to the road could make you swerve dangerously.
- When towing, you should not exceed 80 km/h.
- When heavily loading your vehicle or when towing, your tyres should be inflated to the maximum recommended pressure. Refer to Chapter 7 for information about tyre pressure, Chapter 8 for the tyre placard location and Chapter 4 for information about driving with increased vehicle loads.
- Loads should be secured so that they cannot slip and should be placed in the centre of the trailer / caravan if possible, that is, above the axle.
- Trailer brakes are recommended on trailers / caravans which weigh over 500 kg when loaded.
- The brakes on the trailer / caravan must be designed to cope with the braking requirements of that trailer / caravan under all towing conditions, without adversely affecting the brakes on the vehicle.
- Make sure that you have enough room when cornering and avoid sudden manoeuvres.
- In the case of trailers / caravans with low directional stability, it is advisable to use a stabiliser to dampen the rolling motion.
- The cooling fan is driven electrically and so is not dependant on engine speed. At high engine speeds a lot of heat is produced and at low engine speeds correspondingly less heat is produced. For this reason, when driving uphill, do not shift down into a lower gear (which will increase engine speed) whenever the vehicle can still climb the hill in the higher gear.
- Whenever a towbar is removed, be certain to have any mounting holes in the vehicle underbody properly sealed to prevent the possible entry of exhaust fumes, dust and water.
- Ensure that the tow bar does not obscure the rear licence plate. If necessary, remove the tow bar tongue when it is not required for towing.
- If starting off on hills in a vehicle with manual transmission, the most favourable engine speed is between 2000 and 3000 r.p.m.

Notes

CHAPTER 11

Cleaning

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11-2 Interior cleaning
11-4 Caring for paint
11-7 Paint polishing
11-7 Wheels and tyres
11-8 Exterior glass cleaning
11-10 Holden cleaning products

INTERIOR CLEANING

WARNING:

Many cleaners may be toxic, flammable or may damage the interior. When cleaning the interior, avoid volatile cleaners such as acetone, lacquer thinners, enamel reducers, nail polish removers. Also avoid cleaners such as laundry soaps, bleaches or reducing agents. Never use carbon tetrachloride, gasoline or naphtha for any cleaning purpose. Be sure the vehicle is well ventilated while using any cleaners and always follow the cleaner manufacturer's recommendations.

Care and cleaning of upholstery

Dust and dirt which accumulates on upholstery should be removed every few weeks; more often with constant driving. This can be done readily with a vacuum cleaner. Before attempting to remove spots and stains, it is necessary to determine, as accurately as possible:

- the type of fabric
- the nature and age of the stain
- the effect of the stain removal agent upon the colour, structure and general appearance of the upholstery.

It is essential that stains be removed as soon as possible after they have been made. If they are allowed to remain on the fabric for any length of time they very often become oxidised or set, and removal becomes difficult, if not impossible.

Cleaning PVC coated fabrics

Vinyl (PVC) coated fabrics are used for seating and auxiliary trimming. The grades used vary according to their function. PVC fabrics are generally made by coating fabric with synthetic resins. Care of PVC fabrics is a relatively simple but important matter. The surface should be wiped over with a dry cloth during the regular cleaning of the vehicle.

Should dirt accumulate and become embedded in the material pattern, the following procedure is recommended.

1. Using lukewarm water and soap, or Holden Velour Fabric and Vinyl Cleaner, work up thick suds on a piece of cheesecloth and apply to the surface. A soft bristle brush can be used to remove stubborn stains or dirt embedded in the grain of the material.
2. Repeat using only a damp cloth and no soap.
3. Wipe dry with a soft cloth. The above cleaning instructions also apply to the rubber floor mats.

Cleaning leather trim (if fitted)

To remove surface dust and grit, regularly wipe leather with 'Softly' or similar or mild detergent in warm water using a soft cloth or sponge. Clean leather every 3 months with Holden Leather Cleaner or a mild saddle soap and a damp soft cloth to remove in-ground dirt which is not visible. Allow leather to dry naturally and apply Holden Leather Protector or a colourless bee's wax dressing. To revitalise the leather upholstery use Holden Leather Revitaliser.

INTERIOR CLEANING cont.

Cleaning cloth trim

Where the seats in your vehicle are upholstered with cloth, the following instructions should be observed.

- Most loose dirt and dust can be removed by a vacuum cleaner or soft brush.
- DO NOT use a whisk broom or a coarse hair brush.
- If normal soiling should take place it is recommended that the fabric be cleaned with Holden Velour Fabric and Vinyl Cleaner.

Vehicles with airbags

Use only a dry cloth or mild cleaner to clean the steering wheel and instrument panel. DO NOT use any aggressive cleaning agents.

Cleaning carpet

Thoroughly brush or vacuum the carpet. In many instances the carpet may require no further cleaning. If the carpet is extremely soiled, thoroughly vacuum it to remove loose dirt then, using Holden Velour Fabric and Vinyl Cleaner, clean approximately one square foot at a time. After each area is cleaned, remove as much of the cleaner as possible with a vacuum cleaner.

Cleaning seat belts

Cleaning of seat belts can be carried out by using a mild non-abrasive soap and lukewarm water. After washing be sure to thoroughly sponge the washing solution out of the belts.

WARNING:

Do not bleach or dye seat belts since this may severely weaken them.

Cleaning interior glass

The interior glass area of the vehicle should be cleaned using Holden Glass Cleaner with a clean soft cloth. Care must be taken when cleaning inside the rear window so as not to damage the demister.

Never use abrasive cleaners on any vehicle glass, as they may cause scratches.

CARING FOR PAINT

To help preserve that shiny new vehicle finish, special attention should be given to correctly treating those conditions that can damage the paint.

Road bloom: If, over a long period of time, oils, dirt, exhaust and other pollutants are allowed to build up, they may combine to affect the paint finish.

Etching: Tree sap, bird droppings, salt water and other natural deposits can, if allowed to stay on the paint, leave an etching or scarring.

Pitting: Tar spots and some industrial fallout can react chemically and may cause pitting to the surface of the paint.

Paint inspection

Regular inspections of the vehicle should be made for scratch marks, cracks or damaged areas, all of which could develop rust. Any deep scratches, cracks or breakdown in the finish should be repaired without delay. Care should be taken to ensure that any rusting is counteracted immediately, otherwise rust 'creep' will extend beyond the damaged area, particularly in tropical or coastal areas, where the moist, or salt-laden air accelerates rusting. The paint finish of the vehicle gives a very high degree of protection against the weather, but it should be realised that wear and deterioration occur when the vehicle is exposed to elements for prolonged periods. The vehicle therefore should be garaged whenever possible.

To prevent damage of the paint surface, foreign matter should always be removed as soon as possible. **Due to the acidity, it is recommended that foreign matter such as bird droppings be removed within 24 hours.**

The way the paint keeps its condition over time can be assisted by you. The easiest way to keep that paint looking bright and shiny is to keep it clean. A wash once a week will do wonders. However, it must be done correctly.

Washing your vehicle

1. Never use an automatic wash that has anything that touches the paint other than water.
2. Wash your vehicle once a week to remove any build up of road grime that may have been deposited on your paint.
3. Find a cool, shady spot to wash your vehicle. Do not ever wash it in direct sunlight.
4. Hose the vehicle down from top to bottom with lots of cold water. This removes any grit or other loose particles and substances. Do not use a sponge or cloth yet.
5. Fill a bucket with lukewarm water and add no more than 2 capfuls of gentle detergent. Do not use hot water, strong soap or chemical detergents.
6. To remove bird droppings, soak with a wet sponge for several minutes before washing off. If still persistent, use a solution of 1 litre of water and 110 grams of dissolved baking soda (Bicarbonate of Soda). Flush the washed parts with clean water.
7. Starting with the roof, use a clean sponge to clean a small section at a time. Do not allow liquid to dry before rinsing off that section with clean water. When you have completed each section, rinse the whole vehicle again with cold water.
8. Dry the clean vehicle thoroughly with a good quality Chamois.

CARING FOR PAINT cont.

WARNING:

Care should be taken when moving the vehicle after washing, in case water has affected the brakes. Applying the brakes lightly will indicate whether they have been affected. To dry them quickly, lightly apply the brakes while maintaining a slow forward speed with a clear area ahead, until brake performance returns to normal.

Removing stains, such as grease, oil and tar spots

Just washing you vehicle regularly means that most of the harmful substances deposited on the paint will be removed before they can cause permanent damage. However, some substances are not easy to remove. So if you notice stains on the paint, ensure that you remove them at the earliest possible opportunity.

Grease and oil, and even tar if it is fresh, can be removed from the paint with a little kerosene or turpentine. As a precaution against staining, wash and polish the area as soon as possible after the stain has been removed.

A rubbing or cutting compound can be used after a normal wash. But this should never be done on a regular basis because it removes paint.

WARNING:

- **Some chemical cleaners used for removing road oils and tars from painted surfaces have been found to be detrimental to automotive paint.**
- **If petrol is spilt on the paint when refilling, flush off immediately with clean water, as petrol has a tendency to stain or soften new paint finish during the weathering out period, particularly when the vehicle is exposed to high temperatures.**
- **Petrol MUST NOT be used to clean any painted or plastic surfaces.**

Ventilation system intake

The intake area between the bonnet and windscreen may collect leaves, which will impair air flow into the vehicle.

It is recommended that this area be cleared of debris whenever you wash your vehicle.

Under vehicle washing

Your vehicle has a factory-applied PVC undercoating in the wheel arches (including longitudinal members) which provides permanent protection and needs no special maintenance. The surfaces of the vehicle underside not covered by PVC are provided with a durable protective wax coating. Once a year, preferably before the start of the cold season the wax coating and PVC coating should be checked and if necessary, restored to perfect condition. Commercial bitumen and rubber materials can damage PVC coating. Have all work on the underbody performed by a Holden Retailer, as it requires knowledge of the specified materials and experience concerning their application.

The underbody should be washed following the end of the cold weather season to remove any dirt adhering to the underbody, since this may also contain salt.

CARING FOR PAINT cont.

Waxing

Wax your vehicle regularly, in particular after it has been washed using a detergent, or at the latest when water no longer forms beads on the paintwork, otherwise the paintwork will dry out.

Never let things deteriorate this far. Waxing prevents harmful chemical action.

Also ensure that edges, folds on opened doors, flaps and the areas that they cover are all waxed.

Paintwork damage

Minor paint damage such as stone chips, scratches, etc., should be treated immediately with Holden Touch-up Paint or Aerosol before corrosion can form. If corrosion has already formed, consult a Holden Retailer. Do not forget the surfaces and edges nearest to the road where rust may also form unnoticed.

Exterior lights

Headlights and other protective light bezels are made of plastic. If they require additional cleaning after the vehicle has been washed, clean them with a gentle detergent. Never clean in the following ways:

- Do not use any abrasive or caustic agents.
- Do not use an ice scraper.
- Do not clean them dry.

Engine compartment

Important areas of the engine compartment have been provided with permanent protection at the factory in the form of a high-quality, smooth protective lacquer coating. Parts of the engine compartment lacquered in the same colour as the vehicle paintwork can be treated the same way as all painted surfaces. Wash the engine only if absolutely necessary. Before washing the engine, protect the alternator and brake fluid reservoir with plastic covers.

When washing the engine with a steam-jet cleaner, do not direct the steam jet at components of the antilock brake system, the automatic air conditioning system, the auxiliary heating system heater or the belt drive and its components.

When the engine is washed, subsequently applied protective wax is also removed. After washing, the engine as well as parts of the brake system, axle components (with steering) and body parts and cavities should therefore be thoroughly coated with Protective Wax by a Holden Retailer.

Do not use high-pressure jet cleaners on wheels and tyres.

PAINT POLISHING, WHEELS AND TYRES

Polishing

Under normal circumstances the paint does not need polishing to retain its shine. A weekly wash is sufficient. However, the use of a Polymer Glaze about every 3 months will reduce the effects of road bloom by removing natural contaminants which can build up on the paint.

Note: Do not attempt to apply a polish without first washing to remove loose grit, surface dirt, dust or grease etc.

Tyres

Sponging with cold water is all that is necessary for normal cleaning. Oil and grease should be removed with soap and water or detergent. For tar or other substances, a mild abrasive, such as mechanic's hand soap or kitchen cleaning powder, may be used if necessary. Thoroughly wash the tyres with water to finish. Petrol must not be used for cleaning tyres.

New tyre look can be restored using Holden Tyre and Bumper Shine.

Alloy wheels

To preserve the original appearance of alloy wheels, keep them clean and free from build up of road dirt. Holden Wheel Cleaner can be used for cleaning alloy wheels. Do not use abrasive cleaners on alloy wheels.

EXTERIOR GLASS CLEANING

Glass cleaning – general

Special care should be taken to avoid scratching the glass. If it is cleaned at the same time as the rest of the vehicle, there is a possibility that particles of grit will cause fine scratches. Flush off any mud on the glass when washing the body, but leave the final cleaning and polishing until afterwards. Use Holden Glass Cleaner and wash each section of glass in turn, making sure that the water, its container and the sponge are quite clean and free from grit. Clean old linen cloth is better than new material for polishing glass.

Windscreen

It is important that the windscreen be kept clean so that the wiper blades may be as effective as possible. Old wiper blades can cause windscreen scratching and so should be regularly inspected and replaced.

Abrasive cleaners should never be used to clean glass as they can cause scratches, impairing night vision. After the windscreen has been cleaned with a wet sponge it should be wiped over with a soft, lint free cloth or chamois.

It is recommended that Holden Optikleen be added to the windscreen washer reservoir.

Wiper blades

Oil and road scum thrown up on the windscreen will cause smearing when the wipers are switched on, when the dirt is transferred onto the wiper blades. Many owners, whilst they methodically clean the windscreen glass, omit to clean the wiper blades and consequently smearing of the glass reappears immediately the wiper blades are used. The blades can be cleaned by lifting them off the windscreen and cleaning with Holden Optikleen and a clean cloth.

Note: Do not operate the wiper blades by hand as this may damage the wiper drive mechanism

If the wiper blades are used to clean dust and dirt from the windscreen in dry conditions always use the washer system first to wet the windscreen. Ensure that the windscreen washer reservoir is not empty.

Should the wiper blades be frozen to the windscreen, they must be lifted off and freed by hand before switching on the wipers.

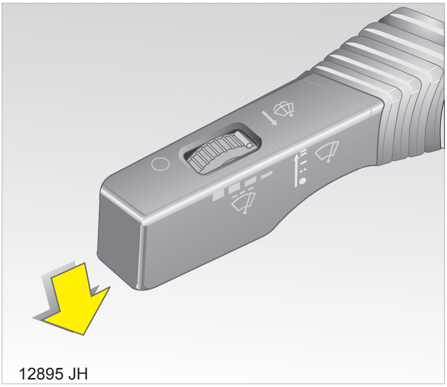
EXTERIOR GLASS CLEANING cont.

Service setting for front wipers

Use this setting when cleaning or replacing the windscreen wipers.

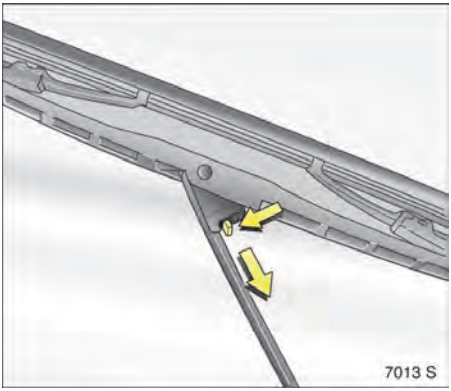
Within eight seconds of switching off the ignition, push the windscreen wiper lever downwards. Release the lever as soon as the wipers are vertical.

To return the wipers to the horizontal position, turn the ignition on and repeat this procedure.



Remove wiper blades

With the windscreen wipers in the service setting, lift the wiper off the windscreen. Press the release lever as illustrated to remove the wiper blade.



HOLDEN CLEANING PRODUCTS

PART NUMBER	SIZE	DESCRIPTION	USAGE
92145132	237 ml	Quick and Easy Speed Finish	Seals in a deep, lustrous glazed finish. Long life protection from oxidation, salt and weather damage.
92145418	437 ml	Quick and Easy Speed Finish	Seals in a deep, lustrous glazed finish. Long life protection from oxidation, salt and weather damage.
92145130	237 ml	All Purpose Cleaner	Cleans and deodorises velour, most vinyl upholstery, hood linings, mats and carpets, etc.
92145416	437 ml	All Purpose Cleaner	Cleans and deodorises velour, most vinyl upholstery, hood linings, mats and carpets, etc.
92145133	237 ml	Glass Cleaner	Cleans all glass surfaces.
92145419	437 ml	Glass Cleaner	Cleans all glass surfaces.
92140005	500 ml	Optikleen	Windscreen washer solvent.
92140004	5 ml	Optikleen Sachet	Windscreen washer solvent; 1 sachett per washer bottle refill.
92145129	237 ml	Hi Suds Car Wash	Cleans vehicle exterior.
92145415	437 ml	Hi Suds Car Wash	Cleans vehicle exterior.
92145131	237 ml	Vinyl and Trim Dressing	Seals and protects vinyl upholstery and plastic trim.
92145417	437 ml	Vinyl and Trim Dressing	Seals and protects vinyl upholstery and plastic trim.
92145140	120 ml	Leather Revitaliser	Revitalises the leather upholstery.
92145141	120 ml	Leather Cleaner	Cleans the leather upholstery.
92145142	120 ml	Leather Protector	Protects the leather upholstery.
92145143	1 Kit	Leather Care Kit	Contains leather revitaliser, cleaner and protector.
92145135		Chamois	Cloth for wiping off excess water from the vehicle's exterior after washing and rinsing.
92145134		Handle Grip Sponge	Sponge for washing the vehicle.
92145136		Microfibre Glass Cleaning Cloth	Cloth for cleaning all glass surfaces.
92145137		Microfibe General Purpose Cleaning / Polishing Cloth	Cloth for general purpose cleaning / polishing.

CHAPTER 12

Servicing

Page

12-2 Service intervals
12-3 Additional service requirements
12-5 Maintenance Schedule
12-7 Service coupons

SERVICE INTERVALS

When it comes to service, remember that your Holden Retailer has the trained personnel and specialised equipment to correctly service your vehicle. Your Retailer invites you to return for all your service needs both during and after the warranty period.

The safety, economy, emission control, performance and reliability of your vehicle cannot be assured unless regular maintenance is performed, preferably by factory-trained technicians at Holden Retailers.

Therefore, it is in the owner's interest that the following services are performed at the specified distance or time duration (whichever occurs first).

1 500 km	– 1 month inspection
15 000 km	– 1 year
30 000 km	– 2 years
45 000 km	– 3 years
60 000 km	– 4 years
75 000 km	– 5 years
90 000 km	– 6 years
105 000 km	– 7 years
120 000 km	– 8 years
135 000 km	– 9 years
150 000 km	– 10 years
165 000 km	– 11 years
180 000 km	– 12 years

The 1 month (1500 km) inspection will be performed without cost for labour by the Selling Retailer.

This service may be carried out by another Holden Retailer provided you have a letter of introduction from the Selling Retailer .

The Selling Retailer will supply the necessary letter of introduction upon request.

The services shown in this schedule between 15 000 km and 180 000 km are to be performed after 180 000 km at the same intervals.

Note: All maintenance services as listed in this handbook and replacement of service items are the responsibility of the owner and as such are not considered, under the provisions of the New Vehicle Warranty to be rectification of defective material and workmanship. Items such as wheel alignment, necessary adjustments to drive belts, transmission, clutch, park brake etcetera or any other items which may require servicing due to fair wear and tear will be carried out at the owner's cost.

Damage caused by failure to have proper maintenance services carried out by an authorised Holden Retailer or authorised Service Outlet or in accordance with Holden's specifications, may void your New Vehicle Warranty. It is strongly recommended that you read the New Vehicle Warranty in Chapter 9 so that you are aware of your Warranty exclusions.

Service coupons are provided further on in this chapter. When each service is performed, the coupon is removed so that the following service coupon is readily visible to remind you when the next service is due.

After the service is completed, the owner should check that the service has been validated by the Retailer stamping and signing the coupon stub. This is important as it will not only assist in the determination of warranty claims, but will enhance the value of the vehicle when selling.

ADDITIONAL SERVICE REQUIREMENTS

If your vehicle operates under any of the conditions listed in the table following, it is recommended that some items be serviced more frequently than the intervals specified in the Maintenance Schedule.

Note: The extra services shown in the table only need to be used if your vehicle operates continuously in that condition.

If you drive under any of these conditions on a one off basis, e.g. a holiday trip, then an extra service should be performed for that period only.

As a guide, if you operate the vehicle continually for a period of one month or 1000 km under any of the conditions, then Holden recommends additional services.

If at any time it is considered that the above items or other items should be more frequently serviced due to the type of operation or before a long trip, discuss the situation with the service manager of your Holden Retailer.

Change automatic transmission fluid @ 60 000km or 4 years (whichever comes first)	**A**	**B**	**C**
Replace engine oil and filter @ 5000km or 3 months (whichever comes first)	**A**		

A = Stop-start driving, excessive idling or low speed operation as experienced in inner city driving, e.g. taxi, police, door to door delivery.

B = Caravan or trailer towing.

C = Extended heavy load high speed operation in temperatures above 35°C.

ADDITIONAL SERVICE REQUIREMENTS cont.

SPECIAL SERVICE FOR ADDITIONAL
SERVICE REQUIREMENTS

Date .... km ....
Items performed ....
....
....
....
Servicing
Retailer ....

SPECIAL SERVICE FOR ADDITIONAL
SERVICE REQUIREMENTS

Date .... km ....
Items performed ....
....
....
....
Servicing
Retailer ....

SPECIAL SERVICE FOR ADDITIONAL
SERVICE REQUIREMENTS

Date .... km ....
Items performed ....
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Servicing
Retailer ....

SPECIAL SERVICE FOR ADDITIONAL
SERVICE REQUIREMENTS

Date .... km ....
Items performed ....
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Servicing
Retailer ....

SPECIAL SERVICE FOR ADDITIONAL
SERVICE REQUIREMENTS

Date .... km ....
Items performed ....
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Servicing
Retailer ....

SPECIAL SERVICE FOR ADDITIONAL
SERVICE REQUIREMENTS

Date .... km ....
Items performed ....
....
....
....
Servicing
Retailer ....

MAINTENANCE SCHEDULE

Use odometer reading or years, whichever occurs first	x 1000 km	1.5	15	30	45	60	75	90	105	120	135	150	165	180
	or years	1/12	1	2	3	4	5	6	7	8	9	10	11	12
SERVICE ITEMS														
Indicators, lights, signalling devices and airbag – check visually		1/12	1	2	3	4	5	6	7	8	9	10	11	12
Batteries, remote control (including the spare key) – replace				2		4		6		8		10		12
Windscreen wipers and washer system – check, correct		1/12	1	2	3	4	5	6	7	8	9	10	11	12
COOLANT – check level, check coolant %														
COOLANT – replace							5					10		
Battery terminals – check securely connected		1/12	1	2	3	4	5	6	7	8	9	10	11	12
Pollen filter – replace				2		4		6		8		10		12
Air cleaner element – replace						4				8				12
Spark plugs – replace										8				
Drive belts – check			1	2	3	4	5	6	7	8	9	10	11	12
3.2 L engine: Toothed belt and tensioner assembly – replace						4				8				12
Power steering – check level visually for leaks, check correct oil level		1/12	1	2	3	4	5	6	7	8	9	10	11	12
Engine oil and oil filter – change			1	2	3	4	5	6	7	8	9	10	11	12
Fuel filter – replace						4				8				12
Parking brake – check, adjust (wheels under no load): wheel suspension and springing, front and rear, brake pipes, brake pressure hoses, fuel lines and exhaust system – check visually		1/12	1	2	3	4	5	6	7	8	9	10	11	12
Outer body / underbody – corrosion protection – check		1/12	1	2	3	4	5	6	7	8	9	10	11	12
Front / rear wheel brakes – check visually (brake pads)			1	2	3	4	5	6	7	8	9	10	11	12
Automatic transmission – check fluid level				2		4		6		8		10		12

MAINTENANCE SCHEDULE cont.

Use odometer reading or years, whichever occurs first	x 1000 km	1.5	15	30	45	60	75	90	105	120	135	150	165	180
	or years	1/12	1	2	3	4	5	6	7	8	9	10	11	12
SERVICE ITEMS														
AUTO TRANS – fluid change		Fluid not changed under normal conditions. Refer to page 12-3												
Engine, transmission (MT, AT), AC compressor, rear differential – check for leakage		1/12	1	2	3	4	5	6	7	8	9	10	11	12
Level control – check		1/12	1	2	3	4	5	6	7	8	9	10	11	12
Rubber boots – check		1/12	1	2	3	4	5	6	7	8	9	10	11	12
Brake / clutch fluid – change				2		4		6		8		10		12
Wheel attachment – loosen and tighten to torque 110 Nm; tyre condition – check: inflation pressure (including sprare wheel) – check, correct		1/12	1	2	3	4	5	6	7	8	9	10	11	12
Headlight aiming – check, correct			1	2	3	4	5	6	7	8	9	10	11	12
Door hinges, door stops, lock cylinder, hood release, striker, tailgate hinges – lubricate			1	2	3	4	5	6	7	8	9	10	11	12
ROAD TEST and reset service due light		1/12	1	2	3	4	5	6	7	8	9	10	11	12
SERVICE LABOUR TIMES														
If 2.2 litre engine fitted		–	1.4	1.6	1.4	1.7	1.7	1.6	1.4	1.9	1.4	1.9	1.4	1.7
If 3.2 litre engine fitted		–	1.4	1.6	1.4	3.9	1.7	1.6	1.4	4.6	1.4	1.9	1.4	3.9

- The owner will be charged for all lubricants and materials used plus labour at the times recommended above.
- The repair or replacement of any part found faulty during a service check and not covered by the Holden warranty will be added to the charges.
- Where any deficiencies are noted, such items should be reported to the owner / operator so that the extra work required can be authorised.
- The use of break-in oil, tune up compounds, friction reducing compounds and other supplemental additives are not recommended; their use will not only increase operating costs, but may indeed be harmful to your vehicle.

1500 km or 1 month Inspection Validation

This vehicle has been thoroughly checked in accordance with the 1500 km / one month inspection.

Retailer ....

Service Manager's signature ....

Date .... Odometer reading ....

1500 km
or 1 month
INSPECTION

Holden invites the new owner of this vehicle to return to the selling Retailer for a free service inspection at 1500 km.

Mr.
Owner's Name Mrs. ....
Miss.
Other............

Address ....
Town ....
State .... Postcode ....
Reg. no. .... Engine no ....
ISOVIN .... Model ....
Odometer reading .... Date of Acquisition ....

Selling
Retailer's
Stamp and
Signature ....

This vehicle has been thoroughly checked in accordance with the items on the reverse side of this voucher.

This inspection is provided free of charge.

Servicing
Retailer's
Stamp and
Signature

Servicing Retailer ....
Town .... State ....

Owner's signature ....

☐ Indicators, lights, signalling devices and airbag – check visually

☐ Windscreen wipers and washer system – check, correct

☐ Coolant – check level and check %

☐ Battery terminals – check securely connected

☐ Power steering – check system for leaks

☐ Parking brake – check, adjust: wheel suspension and springing, front and rear, brake pipes, brake pressure hoses, fuel lines and exhaust system (check visually)

☐ Outer body / underbody – corrosion protection check

☐ Engine, transmission (MT, AT), AC compressor, rear differential – check for leakage

☐ Rubber boots – check

☐ Wheel attachment – re-torque wheel nuts, check tyre condition and tyre pressure (including spare)

☐ Road test and reset service due light

15 000 km or 1 year Service Validation

Servicing Retailer .... Additional services performed: ....

Brake / clutch fluid changed: YES / NO ....

Date of Service ....

Odometer ....

Signed ....

---

15 000 km or 1 year

SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 1.4 hours

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....

....

....

Signature ....

Date ....

☐ Indicators, lights, signalling devices and airbag – check visually

☐ Windscreen wipers and washer system – check, correct

☐ Coolant – check level and check %

☐ Battery terminals – check securely connected

☐ Drive belts – check

☐ Power steering – check system for leaks

☐ Engine oil and oil filter – change

☐ Parking brake – check, adjust: wheel suspension and springing, front and rear, brake pipes, brake pressure hoses, fuel lines and exhaust system (check visually)

☐ Outer body / underbody – corrosion protection check

☐ Front / rear wheel brakes – check visually (brake pads)

☐ Engine, transmission (MT, AT), AC compressor, rear differential – check for leakage

☐ Rubber boots – check

☐ Wheel attachment – re-torque wheel nuts, check tyre condition and tyre pressure (including spare)

☐ Headlight aiming – check, correct

☐ Door hinges, door stops, lock cylinder, hood release, striker, tailgate hinges – lubricate

☐ Road test and reset service due light

30 000 km or
2 year
Service
Validation

Servicing Retailer ....

Brake / clutch fluid changed: YES / NO ....

Date of Service ....

Odometer ....

Signed ....

Additional services performed: ....

....

....

....

....

30 000 km or 2 years

SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 1.6 hours
- add 0.2 hours if brake / clutch fluid changed

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....

....

....

Signature ....

Date ....

☐ Indicators, lights, signalling devices and airbag – check visually

☐ Batteries, remote control (including the spare key) – replace

☐ Windscreen wipers and washer system – check, correct

☐ Coolant – check level and check %

☐ Battery terminals – check securely connected

☐ Pollen filter – replace

☐ Drive belts – check

☐ Power steering – check system for leaks

☐ Engine oil and oil filter – change

☐ Parking brake – check, adjust: wheel suspension and springing, front and rear, brake pipes, brake pressure hoses, fuel lines and exhaust system (check visually)

☐ Outer body / underbody – corrosion protection check

☐ Front / rear wheel brakes – check visually (brake pads)

☐ Automatic transmission – check fluid level

☐ Engine, transmission (MT, AT), AC compressor, rear differential – check for leakage

☐ Rubber boots – check

☐ Wheel attachment – re-torque wheel nuts, check tyre condition and tyre pressure (including spare)

☐ Headlight aiming – check, correct

☐ Door hinges, door stops, lock cylinder, hood release, striker, tailgate hinges – lubricate

☐ Road test and reset service due light

☐ BRAKE / CLUTCH FLUID – change every 2 years (regardless of km)

45 000 km or 3 years Service Validation

Servicing Retailer ....
Additional services performed: ....

Brake / clutch fluid changed: YES / NO
....

Date of Service ....

Odometer ....

Signed ....

45 000 km or 3 years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 1.4 hours
- add 0.2 hours if brake / clutch fluid changed

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....

....

....

Signature ....

Date ....

- ☐ Indicators, lights, signalling devices and airbag – check visually
- ☐ Windscreen wipers and washer system – check, correct
- ☐ Coolant – check level and check %
- ☐ Battery terminals – check securely connected
- ☐ Drive belts – check
- ☐ Power steering – check level visually for leaks, check correct oil level
- ☐ Engine oil and oil filter – change
- ☐ Parking brake – check, adjust: wheel suspension and springing, front and rear, brake pipes, brake pressure hoses, fuel lines and exhaust system (check visually)
- ☐ Outer body / underbody – corrosion protection check
- ☐ Front / rear wheel brakes – check visually (brake pads)
- ☐ Engine, transmission (MT, AT), AC compressor, rear differential – check for leakage
- ☐ Rubber boots – check
- ☐ Wheel attachment – re-torque wheel nuts, check tyre condition and tyre pressure (including spare)
- ☐ Headlight aiming – check, correct
- ☐ Door hinges, door stops, lock cylinder, hood release, striker, tailgate hinges – lubricate
- ☐ Road test and reset service due light

- ☐ BRAKE / CLUTCH FLUID – change every 2 years (regardless of km)

60 000 km or 4 years Service Validation

Servicing Retailer .... Additional services performed: ....

Brake / clutch fluid changed: YES / NO ....

Date of Service ....

Odometer ....

Signed ....

60 000 km or 4 years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 1.9 hours (if 2.2 litre engine fitted)
- 4.1 hours (if 3.2 litre engine fitted)
- add 0.2 hours if brake / clutch fluid changed

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....

....

....

Signature ....

Date ....

- ☐ Indicators, lights, signalling devices and airbag – check visually
- ☐ Batteries, remote control (including the spare key) – replace
- ☐ Windscreen wipers and washer system – check, correct
- ☐ Coolant – check level and check %
- ☐ Battery terminals – check securely connected
- ☐ Pollen filter – replace
- ☐ Air cleaner element – replace
- ☐ Spark plugs – replace
- ☐ Drive belts – check
- ☐ 3.2 L engine: Toothed belt and tensioner assembly – replace
- ☐ Power steering – check system for leaks
- ☐ Engine oil and oil filter – change
- ☐ Fuel filter – replace
- ☐ Parking brake – check, adjust: wheel suspension and springing, front and rear, brake pipes, brake pressure hoses, fuel lines and exhaust system (check visually)
- ☐ Outer body / underbody – corrosion protection check
- ☐ Front / rear wheel brakes – check visually (brake pads)
- ☐ Automatic transmission – check fluid level
- ☐ Engine, transmission (MT, AT), AC compressor, rear differential – check for leakage
- ☐ Rubber boots – check
- ☐ Wheel attachment – re-torque wheel nuts, check tyre condition and tyre pressure (including spare)
- ☐ Headlight aiming – check, correct
- ☐ Door hinges, door stops, lock cylinder, hood release, striker, tailgate hinges – lubricate
- ☐ Road test and reset service due light

- ☐ BRAKE / CLUTCH FLUID – change every 2 years (regardless of km)

75 000 km or
5 years
Service
Validation

Servicing Retailer ....
Brake / clutch fluid changed: YES / NO
Date of Service ....
Odometer ....
Signed ....

Additional services performed: ....
....
....
....
....

75 000 km or 5 years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 1.7 hours
- add 0.2 hours if brake / clutch fluid changed

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....
....
....

Signature ....

Date ....

☐ Indicators, lights, signalling devices and airbag – check visually

☐ Windscreen wipers and washer system – check, correct

☐ Coolant – replace

☐ Battery terminals – check securely connected

☐ Drive belts – check

☐ Power steering – check system for leaks

☐ Engine oil and oil filter – change

☐ Parking brake – check, adjust: wheel suspension and springing, front and rear, brake pipes, brake pressure hoses, fuel lines and exhaust system (check visually)

☐ Outer body / underbody – corrosion protection check

☐ Front / rear wheel brakes – check visually (brake pads)

☐ Engine, transmission (MT, AT), AC compressor, rear differential – check for leakage

☐ Rubber boots – check

☐ Wheel attachment – re-torque wheel nuts, check tyre condition and tyre pressure (including spare)

☐ Headlight aiming – check, correct

☐ Door hinges, door stops, lock cylinder, hood release, striker, tailgate hinges – lubricate

☐ Road test and reset service due light

☐ BRAKE / CLUTCH FLUID – change every 2 years (regardless of km)

90 000 km or
6 years
Service
Validation

Servicing Retailer ....
Brake / clutch fluid changed: YES / NO
Date of Service ....
Odometer ....
Signed ....

Additional services performed: ....
....
....
....
....

90 000 km or 6 years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 1.6 hours
- add 0.2 hours if brake / clutch fluid changed

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....
....
....

Signature ....

Date ....

☐ Indicators, lights, signalling devices and airbag – check visually

☐ Batteries, remote control (including the spare key) – replace

☐ Windscreen wipers and washer system – check, correct

☐ Coolant – check level and check %

☐ Battery terminals – check securely connected

☐ Pollen filter – replace

☐ Drive belts – check

☐ Power steering – check system for leaks

☐ Engine oil and oil filter – change

☐ Parking brake – check, adjust: wheel suspension and springing, front and rear, brake pipes, brake pressure hoses, fuel lines and exhaust system (check visually)

☐ Outer body / underbody – corrosion protection check

☐ Front / rear wheel brakes – check visually (brake pads)

☐ Automatic transmission – check fluid level

☐ Engine, transmission (MT, AT), AC compressor, rear differential – check for leakage

☐ Rubber boots – check

☐ Wheel attachment – re-torque wheel nuts, check tyre condition and tyre pressure (including spare)

☐ Headlight aiming – check, correct

☐ Door hinges, door stops, lock cylinder, hood release, striker, tailgate hinges – lubricate

☐ Road test and reset service due light

☐ BRAKE / CLUTCH FLUID – change every 2 years (regardless of km)

105 000 km or 7 years Service Validation

Servicing Retailer ....

Brake / clutch fluid changed: YES / NO

Date of Service ....

Odometer ....

Signed ....

Additional services performed: ....

....

....

....

....

105 000 km or 7 years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 1.4 hours
- add 0.2 hours if brake / clutch fluid changed

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....

....

....

Signature ....

Date ....

☐ Indicators, lights, signalling devices and airbag – check visually

☐ Windscreen wipers and washer system – check, correct

☐ Coolant – check level and check %

☐ Battery terminals – check securely connected

☐ Drive belts – check

☐ Power steering – check system for leaks

☐ Engine oil and oil filter – change

☐ Parking brake – check, adjust: wheel suspension and springing, front and rear, brake pipes, brake pressure hoses, fuel lines and exhaust system (check visually)

☐ Outer body / underbody – corrosion protection check

☐ Front / rear wheel brakes – check visually (brake pads)

☐ Engine, transmission (MT, AT), AC compressor, rear differential – check for leakage

☐ Rubber boots – check

☐ Wheel attachment – re-torque wheel nuts, check tyre condition and tyre pressure (including spare)

☐ Headlight aiming – check, correct

☐ Door hinges, door stops, lock cylinder, hood release, striker, tailgate hinges – lubricate

☐ Road test and reset service due light

☐ BRAKE / CLUTCH FLUID – change every 2 years (regardless of km)

120 000 km or 8 years Service Validation

Servicing Retailer .... Additional services performed: ....
Brake / clutch fluid changed: YES / NO ....
Date of Service ....
Odometer ....
Signed ....

120 000 km or 8 years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 1.9 hours (if 2.2 litre engine fitted)
- 4.6 hours (if 3.2 litre engine fitted)
- add 0.2 hours if brake / clutch fluid changed

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....

....

....

Signature ....

Date ....

☐ Indicators, lights, signalling devices and airbag – check visually

☐ Batteries, remote control (including the spare key) – replace

☐ Windscreen wipers and washer system – check, correct

☐ Coolant – check level and check %

☐ Battery terminals – check securely connected

☐ Pollen filter – replace

☐ Air cleaner element – replace

☐ Spark plugs – replace

☐ Drive belts – check

☐ 3.2 L engine: Toothed belt and tensioner assembly – replace

☐ Power steering – check system for leaks

☐ Engine oil and oil filter – change

☐ Fuel filter – replace

☐ Parking brake – check, adjust: wheel suspension and springing, front and rear, brake pipes, brake pressure hoses, fuel lines and exhaust system (check visually)

☐ Outer body / underbody – corrosion protection check

☐ Front / rear wheel brakes – check visually (brake pads)

☐ Automatic transmission – check fluid level

☐ Engine, transmission (MT, AT), AC compressor, rear differential – check for leakage

☐ Rubber boots – check

☐ Wheel attachment – re-torque wheel nuts, check tyre condition and tyre pressure (including spare)

☐ Headlight aiming – check, correct

☐ Door hinges, door stops, lock cylinder, hood release, striker, tailgate hinges – lubricate

☐ Road test and reset service due light

☐ BRAKE / CLUTCH FLUID – change every 2 years (regardless of km)

135 000 km or
9 years
Service
Validation

Servicing Retailer ....
Brake / clutch fluid changed: YES / NO
Date of Service ....
Odometer ....
Signed ....

Additional services performed: ....
....
....
....
....

135 000 km or 9 years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 1.4 hours
- add 0.2 hours if brake / clutch fluid changed

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....
....
....

Signature ....

Date ....

☐ Indicators, lights, signalling devices and airbag – check visually

☐ Windscreen wipers and washer system – check, correct

☐ Coolant – check level and check %

☐ Battery terminals – check securely connected

☐ Drive belts – check

☐ Power steering – check system for leaks

☐ Engine oil and oil filter – change

☐ Parking brake – check, adjust: wheel suspension and springing, front and rear, brake pipes, brake pressure hoses, fuel lines and exhaust system (check visually)

☐ Outer body / underbody – corrosion protection check

☐ Front / rear wheel brakes – check visually (brake pads)

☐ Engine, transmission (MT, AT), AC compressor, rear differential – check for leakage

☐ Rubber boots – check

☐ Wheel attachment – re-torque wheel nuts, check tyre condition and tyre pressure (including spare)

☐ Headlight aiming – check, correct

☐ Door hinges, door stops, lock cylinder, hood release, striker, tailgate hinges – lubricate

☐ Road test and reset service due light

☐ BRAKE / CLUTCH FLUID – change every 2 years (regardless of km)

150 000 km or 10 years Service Validation

Servicing Retailer ....

Brake / clutch fluid changed: YES / NO

Date of Service ....

Odometer ....

Signed ....

Additional services performed: ....

....

....

....

....

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150 000 km or 10 years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 1.9 hours
- add 0.2 hours if brake / clutch fluid changed

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....

....

....

Signature ....

Date ....

☐ Indicators, lights, signalling devices and airbag – check visually

☐ Batteries, remote control (including the spare key) – replace

☐ Windscreen wipers and washer system – check, correct

☐ Coolant – replace

☐ Battery terminals – check securely connected

☐ Pollen filter – replace

☐ Drive belts – check

☐ Power steering – check system for leaks

☐ Engine oil and oil filter – change

☐ Parking brake – check, adjust: wheel suspension and springing, front and rear, brake pipes, brake pressure hoses, fuel lines and exhaust system (check visually)

☐ Outer body / underbody – corrosion protection check

☐ Front / rear wheel brakes – check visually (brake pads)

☐ Automatic transmission – check fluid level

☐ Engine, transmission (MT, AT), AC compressor, rear differential – check for leakage

☐ Rubber boots – check

☐ Wheel attachment – re-torque wheel nuts, check tyre condition and tyre pressure (including spare)

☐ Headlight aiming – check, correct

☐ Door hinges, door stops, lock cylinder, hood release, striker, tailgate hinges – lubricate

☐ Road test and reset service due light

☐ BRAKE / CLUTCH FLUID – change every 2 years (regardless of km)

165 000 km or 11 years Service Validation

Servicing Retailer ....

Brake / clutch fluid changed: YES / NO

Date of Service ....

Odometer ....

Signed ....

Additional services performed: ....

....

....

....

....

165 000 km or 11 years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 1.4 hours
- add 0.2 hours if brake / clutch fluid changed

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....

....

....

Signature ....

Date ....

- ☐ Indicators, lights, signalling devices and airbag – check visually
- ☐ Windscreen wipers and washer system – check, correct
- ☐ Coolant – check level and check %
- ☐ Battery terminals – check securely connected
- ☐ Drive belts – check
- ☐ Power steering – check system for leaks
- ☐ Engine oil and oil filter – change
- ☐ Parking brake – check, adjust: wheel suspension and springing, front and rear, brake pipes, brake pressure hoses, fuel lines and exhaust system (check visually)
- ☐ Outer body / underbody – corrosion protection check
- ☐ Front / rear wheel brakes – check visually (brake pads)
- ☐ Engine, transmission (MT, AT), AC compressor, rear differential – check for leakage
- ☐ Rubber boots – check
- ☐ Wheel attachment – re-torque wheel nuts, check tyre condition and tyre pressure (including spare)
- ☐ Headlight aiming – check, correct
- ☐ Door hinges, door stops, lock cylinder, hood release, striker, tailgate hinges – lubricate
- ☐ Road test and reset service due light

- ☐ BRAKE / CLUTCH FLUID – change every 2 years (regardless of km)

180 000 km
or
12 years
SERVICE
COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 1.9 hours (if 2.2 litre engine fitted)
- 4.1 hours (if 3.2 litre engine fitted)
- add 0.2 hours if brake / clutch fluid changed

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....

....

....

Signature ....

Date ....

180 000 km or
12 years
Service
Validation

Servicing Retailer ....
Brake / clutch fluid changed: YES / NO
Date of Service ....
Odometer ....
Signed ....

Additional services performed: ....
....
....
....
....

☐ Indicators, lights, signalling devices and airbag – check visually
☐ Batteries, remote control (including the spare key) – replace
☐ Windscreen wipers and washer system – check, correct
☐ Coolant – check level and check %
☐ Battery terminals – check securely connected
☐ Pollen filter – replace
☐ Air cleaner element – replace
☐ Spark plugs – replace
☐ Drive belts – check
☐ 3.2 L engine: Toothed belt and tensioner assembly – replace
☐ Power steering – check system for leaks
☐ Engine oil and oil filter – change
☐ Fuel filter – replace
☐ Parking brake – check, adjust: wheel suspension and springing, front and rear, brake pipes, brake pressure hoses, fuel lines and exhaust system (check visually)
☐ Outer body / underbody – corrosion protection check
☐ Front / rear wheel brakes – check visually (brake pads)
☐ Automatic transmission – check fluid level
☐ Engine, transmission (MT, AT), AC compressor, rear differential – check for leakage
☐ Rubber boots – check
☐ Wheel attachment – re-torque wheel nuts, check tyre condition and tyre pressure (including spare)
☐ Headlight aiming – check, correct
☐ Door hinges, door stops, lock cylinder, hood release, striker, tailgate hinges – lubricate
☐ Road test and reset service due light

☐ BRAKE / CLUTCH FLUID – change every 2 years (regardless of km)

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